Access DB# <u>\$4868</u>

TO-1590 (8-01)

SEARCH REQUEST FORM SEARCH REQUEST FORM Scientific and Technical Information Center David Fox Examiner #: 6540 | Date: 1/21/c3

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f more than one search is subm	itted, please prioritize	
lease provide a detailed statement of the nelude the elected species or structures, k	search topic, and describe a eywords, synonyms, acrony that may have a special me	is specifically as possible the subject matter to be searched. yms, and registry numbers, and combine with the concept or aning. Give examples or relevant citations, authors, etc. if
itle of Invention:		Point of Contact:
nventors (please provide full names): _		Susan Hanley Technical Info. Specialist CM1 8B05 Tel: 305-4053
Carliest Priority Filing Date:		enewed 2/2/63
	de all pertinent information (f	parent, child, divisional, or issued patent numbers) along with the
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ate Searcher Picked Up: // 22	Bibliographic	Dr.Link
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January 25, 2003, 21:54:27; Search time 2843 Seconds (Withbot alignments) 9653.401 Million cell updates/sec 944 . 1 Eggegactictctctctctc......atibgiccttgaagctttaa 944 4109280 otal number of hits satisfying chosen parameters: 2054640 seqs, 14551402878 residues US-09-701-023-1_COPY_81_1024 ost-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries M nucleic - nucleic search, using sw model IDENTITY_NUC Gapop 10.0 , Gapext 1.0 90 bbs: 4
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score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Query

Result

Description.		AF146794 Arabidops	AL078467 Arabidops	ALU3U9/8 Arabidops	ALIGINO STADINGS	ACTO400 Mis miscu	AL136531 Human DNA	AC108536 Rattus no	AL133412 Human DNA	X93464 Streptococc	Y18363 Streptococc	AL078504 Human DNA	AC011974 Homo sapi	ACLIU552 Mus muscu	282203 Himan DNA s	ALI58145 Homo sapi	AC124983 Mus muscu	AC037453 Homo sapi	AC092338 Homo sapi	AL/13999 HOMO SAPI	AC094286 Rattus no	,500	AC06004E Homo sapi	å ç	Continuation (4 of	Mus musc	Hum	ACOUSTSUS HOMO Sapi	Homo	Mus m	Mus	Mus	AL/32497 Mus muscu	Mus	Mus musc	WSS2144	uman STS	AC097306 Rattus no		•	linear PLN 08	mplete cds.			a. Embruochyta. Tracheonhyta:	core eudicots;		n.V. is required for initiation of
g g	AF15925	AF14679	ATP27G19	-	ATCHKIVOS			AC108536																												G12787		AC097306	ALIGNMENTS		1302 bp mR	sporocyteless (ntae. Strentoobyt	liophyta; eudicot	100000000000000000000000000000000000000	Yang, W.C., Ye, D., Xu, J. and Sundaresan, V. The SPOROCYTELESS gene of Arabidopsis is requi
Length DB																																						148421 2				s thaliana	GI:55662	s thelians	s thaliana Viridiplant	yta; Magno	1 to 1302)	Ye,D., Xu
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Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
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                                                                     GGAGCCAAGGTTTCCTTTATGATCATAGAATCGCTAGAGCAGCTTCAGTTTCTGCTTCTA 720
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Schletthalter U. Balasubramanian, S., Sieber, P., Chevalier, D.
Wisman, E. and Schnettz, K.
                                                                                                                                                      TGGATGGTGATCAGAATAATGTAGTTCGATCCAACGGTGGTGGATTTTCGAAATACACAA
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Arabidopsis thaliana NOZZLE (NZZ) gene, complete cds.
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POMENASSNINGCTCRKKRLDGODNIVVESNGGERKTYHIPPPMATOPTLLGSBI
HORSOGFLIDHRIARASVSASSTINPFFNSATNHTGPMEDFGSYMGGNPRAGSGOV
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                                                                                                                                                                         Research Link, Singapore 117604, Singapore
                                                                                    2 (bases 1 to 1302)
Yang,W. -C., Yeb., Xu,J. and Sundaresan,V.
Direct Submission
Submitted (14-JUN-1999) Plant Molecular Genetics, Institute of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 TTCT6AGAAACACCCGTCTTGTCGTCAATAGCTCCGGCGAGATCCGGACAGAGACACTGA 120
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ive 0; Mismatches 0; Indels 0
sporogenesis and encodes a novel nuclear protein
Genes Dev. 13 (16), 2108-2117 (1999)
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273 c 275 g 352 t
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/cultivar="Landsberg erecta"
/db_xref="taxon:3702"
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/db_xref="G1:5566240"
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/note-";

ATF27G19 82381 bp DNA linear PLN 01-JUN-1999 Arabidopsis thaliana DNA chromosome 4, BAC clone F27G19 (ESSA Arabidopsis thaliana Bikaryota Viridalantae, Streptophyra; Embryophyra; Tracheophyra; Spermatophyra; Magnollophyra; eudiootyledons; core androte; 1 (bases I to 82381)
Bevan, Hibbert, H. Braun, M., Bolzer, E., Brandt, A.,
Dussterhoeft, A., Bancroft, I., Wewes, H.W., Mayer, K.F.X., Lemcke, K.,
Manniappt, G. and Schweller, C. Direct Submission
Submitted (30-WHV-1999) MIPS, at the Max-Planck-Institut fuer
Submitted (30-WHV-1999) MIPS, at the Max-Planck-Institut fuer
Sicchenie, Am Klopferspitz 18a, D-82152 Martinsried, FRG, E-mail:
Schuelle@mips.biochem.mpg.de_mayer@mips.biochem.mpg.de_Project Coordinator: Mike Bevan, Molecular Genetics Department, Cambridge Laboratory, John Innes Centre, Colney Lane, NR4 70J Norwich, UK, annotation of this entry and other sequences of chromosomes 3, 4 and 5 can be viewed at: http://www.mips.biochem.mpg.de/proj/thal/ /note-"there is a mismatch in this homopolimeric stretch Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis GCTACGATCAGTATCTTCTTCAATCAGATCATCATCAGAGGAGCCAAGGTTTCCTTTATG GCTACGATCAGTATCTTCAATCAGATCATCATCAGAGGAGGCAAGGTTTCCTTTATG ATCATAGAATCGCTAGAGCAGCTTCAGTTTCTGCTTCTAGTACTACTATTAATCCTTATT ATCATAGAATCGCTAGAGCAGCTTCAGTTTCTGCTTCTAGTACTACTATTAATCGTTATT TCAACGAGGCAACAATCATAGGGTACTAAGTATAGTCCATTTATTAATACTCATATATA 902 GGTATATATGTATATAACTGTTGATCTTATTTGATTTAACTGGTGGGGTTTAGGGACCAAT 773 GGAGGAATTTGGGAGCTACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGA 833 GTACGAGTITITICCGGGGAAATATGGTGAAAGAGTTTCAGTGGTGGCTACAACGTCGTC Information on performance of analysis and a more detailed 1082 ACTCGFAGGTGATTGCAGTCCTAATACCATTGATTTGTCCTTGAAGCTTTAA 1133 893 ACTCGTÀGGTGATTGCAGTCCTAATACCATTGATTTGTCCTTGAAGCTTTAA 944 /note-"overlap to BAC M4122 ; please refer /organism="Arabidopsis thaliana" for analysis and annotation" 5126. .5143 EU Arabidopsis sequencing, project. E-mail: michael.bevan@bbsrc.ac.uk TCAACGAGGCAACAATCATAC /db_xref="taxon:3702" /chromosome="4" Location/Qualifiers /variety="Columbia" GI:4972065 (bases 1 to 82381) Arabidopsis thaliana 1, 82381 3095 AL078467.1 Unpublished project) misc_feature misc_feature source ATF27G19/c DEFINITION ORGANISM 722 682 782 842 962 1022 TITLE 622 742 164 ACCESSION REFERENCE AUTHORS KEYWORDS REFERENCE AUTHORS JOURNAL RESULT 3 FEATURES VERSION COMMENT COCUS a ŏ 셤 ã q ò g ò g à g 8 a ò ã PVPVDPGVVLQGFPSSLGSNR1YCGGVGSQQVAIDPV1SPWGPVETSSTTHELSS1SN PQRSQGFVTDRRAASVGFCKKKLDGSDQNVPRSADGSSKTYPITPPPMKGYDOYLLQSDH HQRQGGFVTDRRAASVASSTTIKPYPRATHGFGPREFGSYMEGNPRMSGGV KEYEFPGKYGERVSVVATTSSLVGDCSPWTIDLGJ.KL. /translation="MATSLFFMSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRG RKPGSKTGQQKQKKPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNATRL ...vee-compared to Arabidopsis thaliana Columbia ecotype sequence presented in GenBank Accession number AL030978* Treplace-"c" Arabidopsis thaliana Columbia ecotype in GenBank Accession number AL030978" 240 300 301 361 420 421 480 481 528 528 TTCTGAGAAACACCCGTCTTGTCGTCAATAGCTCCGGCGAGATCCGGACAGAGACACTGA 120 121 AGAGTCGTGGTCGGAAACCAGGATCGAAGACAGGTCAGCAAAAACAGAAGAAACCAACGT 180 GTTTACCCGTACCGGTAGACCCGGGTGTTGTGCTACAAGGCTTCCCAAGCTCACTCGGGA 360 561 602 TTGATTTTTATTTATGTAAAAACTGCAGAAGAAACGTTTGGATGGTGATCAGAATAATG 661 TAGTICGAICCAACGGIGGIGGAITITICGAAAIACACAAIGAIICCICCICCGAIGAAGG 621 Gaps TGGCGACTTCTCTTCTTCATGTCAACAGATCAAAACTCCGTCGGAAACCCAAACGATC 60 ----AGAAGAACGTTTGGATGGTGATCAGAATAATG TGGCGACTTCTCTTCTTCATGTCAACAGATCAAAACTCCGTCGGAAACCCAAACGATC TCGCCGCCGCCACAGTCGGAGACACGTCATCACTCATCGATCTCTAACAAGGTACCC GTTTACCCGTACCGGTAGACCCGGGTGTTGTGCTACAAGGCTTCCCAAGCTCACTCGGGA CTCCATGGGGTTTTGTTGAGGCTCTCCTCCACTACTCATGAGCTCTCTTCAAATCTCAAATC 542 TETTTAATCGTTTTCATCAACATGATTGATATATATATATTTTGCACTTGAAAAGTT GCAACAGGATCTATTGTGGTGGAGTCGGGTCGGGTCAGGTTATGATCGACCCGGTTATTT GCAACAGGATCTATTGTGGGGGGTCGGGTCGGGTCAGGTTATGATCGACCCGGTTATTT 188; Length 1133; Indels CTCAAATGTTTAACGCTTCTTCCAATAATGGCTGTGACATTGCTTCA-; DB 8; I 1.9e-200; ö 324 t 0; Mismatches /protein_id="AAD37775.1" /db_xref="G1:5007009" Score 736; Pred. No. /note="compared to sequence presented /replace="a" 255 g /product-"NO22LE" 78.0%; /gene-"N22" 231 c Best Local Similarity 83.4 Matches 944; Conservative 90 c 323 variation variation Query Match COUNT N 121 181 182 241 242 302 121 481 529 301 361 ASE

this

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832

	to the overlapping BAC M4122; 18(F27G19) versus 17(M4122) A's; the genomic DNA clearly shows 18 A's"	exou	complement(36772. 37103) /qene="#27619.20"
gene	31517, .32602 /dehe="P22619 10"	44,	/number=2
gene	/gord-lement(joint) /complement(joint) /complement(joint)		7619.20"
CDS	Complement(join(3151731960,3204432335,3239432602)) /gene=*F27619.10*	exon	// Unmode 2 complement(3717437326) /gene="F27G19.20"
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exon	PELAUOSEN PEKRINDLEKTLINGNE DIMALAGLINI PELAPTNGLPSYGGYDAFRARG BERSGHVINGONSSGLTGSFGYSSGFGVSGQTFEFRQ" Complement (31217, -31960)	dene	/gene="F2/G19.20" /number= 4240546325
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intron	complement(31961, .32043) /gene="F27619.10"		43203, .47246,43346, .43498,4358743813,43912, .45359, 45432, .46325)
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dene	36023 .38386 //www.mp37219 20m		SOEKSSKKKKKKKKKKKODESAEPSDUSSTETESEDGUSCKKOSKKVITANIVI BOXBANA VEDDODODODODODODO SEDESAESAESAESAESAESAESAESAESAESAESAESAESAE
gene	Complement(3)11(36023. 36688.36772. 37103,37174. 37326, 37369. 38011,38273. 38386)		LOSTNOCATEGO-DEGGEGGG VOGOGGGGGGGGGGGGGGGGGGGGGGGGGGGG
cps	/gene="F27G19.20" complement(join(3602336688,3677237103,3717437326,		GKLRTRNEAEEDWFIRNOAGPETDPSLVKTFVGDHFHINKSSERDVLTDDSFWIHSRV ENQVEDSRLRTEIMDLDVYGTTQQENSAPENTPHEPDDLYMVLGREQDVKPTLLFWTP
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	/note="similarity to D.melanogaster P element CaSpeR-1 gene (white protein), PID:q870996		PTVTKSVKSSTKNEKTPEAAQSKAKPVLRSSTJERLAVARTAPKEPQQKPVTKRTSKP SGYKTEKAOEKKSSKIGOSDAKSVELSRDPSLEIKETVVEDSHSYLSEKOVDALPAVA
	Contains ABC transporters family signature [VSGGERKRVSIGOEI], ATP/GTP-binding site morif A (P-1000)		SVDDFKDIKELHSLPSEETARVKNRPNEIIAEKVQDQTKIDDQETVKNTSVSEDKQIT TKHYGENVGEVASOFR DVSDK SVTPGSFNMPRKYFGAAVGETITSTDDATFADHS
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	TSGLDSTTAGETER TOTAL TOTAL TOTAL THOSE CONTROL TO THE TOTAL TO THE TOTAL		/gene= rz/grz.so-
	LVEKTINPSDFLEDIANGKFLEVISCWPSVGSDESQRPEAMKAALVAFYKTNLLDSVIN EVKGODDLCHKPRESSRVATNTYGDWPTTWWQQFCVLLKRGLKORRHDSFSGMKVAQI	intron	42743, ,42831 /qene="F27G19.30"
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exon	ALTRIGKTKSG" Complement (3602) 36688)	intron	42954. 43061 //menon"E27610 30*
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intron	/ (Complement (3668936771)	govo	/gene="F27G19.30"
	/gene==:z/G13.zu= /number=1	intron	/Dumber=4 43115 43202

	5027 GTACGAGTTTTTTCCGGGGAAATATGGTGAAAGAGTTTCAGTGGTGGCTAAA 893 ACTCGTAGGGGGAGTCCGAAATCAGTGAGTGTGCGTTGAAGTTTTA 8967 ACTCGTAGGTGATGCTAATACAATTGATTGTCGTTGAAGGTTTAA 8967 ACTCGTAGGTGATGCTAATACAATTGATTGTCGTTGAAGGTTTAA 7 4	LOCOS ATMITTOR ATMAILTS THAILING DAY INTEGER FLATOWRA-2000 DEFINITION ATMAINST THAIL DAY ANTONION ALGOROUS STATEMENT OF ALGOROUS STATEMENT OF ALGOROUS STATEMENT OF ALGOROUS STATEMENT ALGOROUS ST	Spermicophytra, Mediolophyta, edulocyladons; core endiocus; REFERENCE (these I to 1) II. Brasicales; Brassicaceae; Arabidopsis. AUTHORS EU Arabidopsis sequenciae, project. TITLE Direct Studiession JOHNAN SUMMILTER (109 - MAR. LOOPERSPILE 18a - DASIZE MARILESIEG, FRG. E-mail: Lickeednips. Subjected (109 - MAR. 2000) MIPS, at the Max-Planck Institut fuer Lickeednips. Subjected (100 - MAR. 2000) ARISE (100 - MAR. 100	ONWHENT Information on performance of analysis and a more detailed annotation of this entry and other sequences of chromosomes 3, 4 and 5 can be viewed at intp://www.mips.biochem.mpg.de/proj/thal/.psnurce 1.0cation/Qualitiers 1.8337	LIR / (Altromasome="4" Altromasome="4" Altro	CONGLAISE SET OF 16634, AA40471, A1997526.1* CONGLAISE SET OF THE THE PROPERTY OF THE
exon 4.70419.30" exon 4.70419.30" former-173619.30" former-173619.3	Set Local Similarity 83.2%, Pred. No. 1.66-199; Satches 942, Conservative 0; Mismatches 2; 1 TGGGGACTTOTOTOTOTARCAACAACAACAACAACAACACAACAACACAAC	5.954 THITTAGAMALACCESTRIPEGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	241 TGGCGGCGCCACAGTGGAGACACTCATCAGTAGCATGGATCGTTACCACGCTACCCGGGGGGGG	561 GCAACAGGATCHATGTGGTGGGGTGGGGTCAGGTATGATCGACCGGGTTATT	481 CTCAAATGTTTAAGGCTTCTTCCAATAATGGCTGTGACATGCTTCA	529

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	TGSTNLASSSGTVPLTDVLVCPSITKSLLSMSKLTQDFPCTVFFFTYDGVRVNDKATKK		LIVIKLKYLPOLKSLCNDRVVLESLEHLEVESCESLKNLPFVPGNIGMINEOMAKEYM
	LLLMGSNRDGLYCLKDDKOFQAFFSTRQRSASDEVWHRRLGHPHPQILQPLERVHCDL		SRTLG."
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g

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----- GGGACCAAT 772

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PLN 16-MAR-2000 /note="strong similarity to Proline synthetase associated - Homo saplens, PID:d1037830 Submitted (10-WAR-2000) MIPPS, at the Max-Planck-Institut fact Biochean, Am Kindoffseptiz 18a, D-82152 Martinstic PRG, Frm. 11: Biochean, Am Kindoffseptiz 18a, D-82152 Martinstic PRG, Emmill: Conciliator: Mile Bewin, Nobecular Genetics Department, Cambridge Laboratory, John Innes Centre, Colley Lane, May 704 Morvich Cambridge Information on performance of analysis and a more detailed annotation of this entry and other sequences of chromosomes 3, 4 and 5 can be viewed at: http://www.mips.biochean.mpg.de/po//pithal. this fragment has an overlap with Architectus at overlap with Architectus of the second of the sequences of chromosomes 3, 4 and 5 can be viewed at: http://www.mips.biochean.mpg.de/po//pithal. this fragment has an overlap with Architectus at overlap with Architectus and and an overlap with Architectus and and an an overlap with Architectus and a Lemcke, K. and 58447 GTACCAGTTTTTTCCGGGGAAATATGGTGAAAGATTTCAGTGGTGGTGGTTAAAACGTCGTC 58388 GGAGGAATTTGGGAGCTACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGA 832 3 (bases 127847 to 198372) Reichert, B.J., Barel, E., Mewes, H.W., Lemcke, K. and Mayer, K.F.X. Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis. 1 (bases 1 to 84417) 4 (bases 185358 to 185634) Volckatert, G., Grymonprez, B., Voet, M., Robben, J., Mewes, H.W. Lemcke, K. and Mayer, K.F.Y. Lecharny, A., Chefdor, F., Krivitzky, M., Kreis, M., Mewes, H.W., Lemcke, K. and Mayer, K.F.X. Uppublished complement(join(7146, .7223,7356, .7437,7485, .766) 7764, .7851,7956, .8002,8081, .8147,8327, .6548)) /gene="Artg26860" GTACGAGTTTTTTCCGGGGAATATGGTGAAAGAGTTTCAGTGGTGGCTACAACGTCGTC Arabidopsis thaliana DNA chromosome 4, contig fragment No. AL161566 7764. 7851,7956. .8002,8081. .8147,8327. .8548)) /gene="A14926860" 58387 ACTCGTAGGTGATTGCAGTCCTAATACCATTGATTGTCTTGAAGCTTTAA 58336 893 ACTCGTAGGTGATTGCAGTCCTAATACCATTGATTTGTCCTTGAAGCTTTAA 944 .7437,7485. Robben, J., Grymonprez, B., Volckaert, G., Mewes, H.W., .7223,7356. /organism="Arabidopsis thaliana" /variety="Columbia" EU Arabidopsis sequencing, project. /db_xref="taxon:3702" complement(join(7146. Location/Qualifiers 1. .198372 (bases 83512 to 129491) /gene="AT4g26860" AL161566.2 GI:7269538 Unpublished 5 (bases 1 to 198372) Direct Submission Mayer, K.F.X. lished Unpublished Idudun ATCHRIV66/c DEFINITION ORGANISM JOURNAL 773 833 REFERENCE AUTHORS JOURNAL REFERENCE AUTHORS JOURNAL gene gene KEYWORDS JOURNAL. REFERENCE AUTHORS JOURNAL REFERENCE AUTHORS AUTHORS CDS RESULT 5 FEATURES VERSION TITLE COMMENT LOCUS q ò g à ò

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contains EST gb:AI995798.1, N97000, T76579"	exou	DVATISTIDAR RICHARMORIOVOLERVVMLLCALINITRITSLE PRUSQRUIF- 92369715
/todoul_at /product="putative Proline synthetase associated protein" /protein_id="CAB79541.1"	intron	/gene="A14g2b8/U" /number=1 9716. :9782
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Contains Aminoacyl-transfer RNA synthetases class-II signatures AAA23-311,Aminoacyl-transfer RNA synthetases class-II signatures AAA73-312.		/db_xref="G1:7269541" /translation=MAPVILVSIATUAVITIANTITREYTSPDAPSPPT TRANSLATION-MAPVITIANTITREYTSPDAPSPPT TRANSLATION-MAPVITIANTIANTIANTIANTIANTIANTIANTIANTIANTIA
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	Gaps
198372	188;
Length	Indels
199;	7
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77.68;	ative
ilarity	Conserv
ch 11 S1m	942;
Query Match 77.5%; Best Local Similarity 83.2%;	Matches

Y 1 GGCGACTTCTCTTCTTCATGTCCAACAGATCAAAACTCCGGGGAAACCAACGATC 60
b 187319 19606ASTCTCTCTTCTTCTATCAACAAAAAAAAAACGTC 187254 TTCTGAGAAACACCCCTCTTGTCGTCAATAGCTCCGGCGAGATCCGGACAGAGACACTGA 120

TCGCCGCCGCCACAGTCGGAGACACGTCATCAGTAGCATCGATCTCAACAACGCTACCC 121 181

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ORIGIN

528 CTCAAATGTTTAACGCTTCTTCCAATAATCGCTGTGACACTTGCTTCA-------

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b 186773 TTTTAATCGTTTTCATCAACATGATTGATATATATAGTTTTTGCACTTGAAAAGTT 186714 b 186713 tigatititatitatgtaaaaacigcagaagaacgtiggatggtggtgatgagaataatg 186654 529 529

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681 TAGTTCGATCCAACGGTGGTGGTTTTCGAATACACAATGATTCCTCCTCCGATGAACG GCTACGATCAGTATCTTCTATCAGATCATCAGAGGAGGCCAAGGTTTCCTTTATG 562 622

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b 186473 TCAACGAGGCAACAAATCATACGTACTAAGTATAGTCCATTTATTAATACTCATATAT 186414 b 186413 GCTATATATATAAACTGTTGATCTTATTTGATTTAACTGGTGGGTTTAGGGACCAT 186354 -------GGGACCAAT 764

TCAACGAGGCAACAATGATAC

742

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REFERENCE AUTHORS

Db 186293 GTACGAGTTTTTTCCGGGGAAATATGTGAAAAAGGTTTCAGTGGCGGGTAAAACGTCGTC 186234 ACTCGTAGGTGATTGCAGTCCTAATACCATTGATTGTGCTTGAAGCTTTAA 893

Db 186233

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linear Sequence 14 from patent US 5670367. 7218 bp 166494 DEFINITION RESULT 6 166494/c

LOCUS

PAT 28-DEC-1997 368 others 1 (bases 1 to 7218)
Dorner, F., Schelflinger, F. and Falkner, F. Gunter.
Recombinant fowlpox virus
Patent: US 5670367-A 14 23-SEP-1997; 4 1929 /organism="unknown" 1 1491 c 1486 g .ocation/Qualifiers 166494.1 GI:2724471 Unclassified 1944 a Unknown. Unknown 166494 source ORGANISM BASE COUNT ACCESSION VERSION TITLE REFERENCE AUTHORS KEYWORDS FEATURES

96 GCCGAGATCCGGACAGAGACACTGAAGAGTCGTGGGAAACCAGGATCGAAGACAGGT 155 .: o DB 6; Length 7218; Indels 68; 4.9%; Score 45.8; DB 3.5%; Pred. No. 0.065; Lve 116; Mismatches Conservative 116; Best Local Similarity 8.5%; Matches 17; Conservative 1 Query Match

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156 CAGCAAAAACAGAAACCAACGTTGAGAGGAATGGGTGTAGCAAAGCTCGAGCGTCAG

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216 AGAATCGAAGAAGAAAGAACCAACTCGCCGCCGCGCACAGTCGGAGACACGTCAGTA 275

276 GCATCGATCTCTAACAACGCT 296

CCCTCGACCTGCAGCCAAGCT 1036

1056

AC104900 LOCUS

RESULT 7

HTG 02-APR-2002 AC104900 141632 bp DNA linear HTG 02-APR-200 Mus musculus clone RP23-305C1, WORKING DRAFT SEQUENCE, 12 ordered pieces. DEFINITION

BiMsa musculado, Metazona, Chordata, Cranlata; Vertebrata; Butaleostomi; Mommalia; Eutherian Rodentia; Sciurognathi; Muridae; Murinae; Mus. Nobesa I to 141632, Birren, B., Linton, L., Nusbaum, C. and Lander, E. Mus musculus, clone RP23-305C1 HTG: HTGS_PHASE2; HTGS_DRAFT; HTGS_FULLTOP Mus musculus. AC104900 AC104900.2 GI:19881874 Unpublished ORGANISM AUTHORS TITLE ACCESSION REFERENCE JOURNAL KEYWORDS VERSION SOURCE

Birren, B., Linton, L., Musbaum, C., Lander, E., All, A., Allan, N., Mondorson, S., Barna, N., Bastien, V., Boqusiawkiy, L., Boukhgaiter, B. Brown, A., Camarta, J. Campopiano, A. Chango, J. Chazaro, B. Cinopel, Y., Colanopia, C. Chings, S., Colymore, M., Cook, M., Cook, M., Cook, M., Cook, M., Cook, M., Cook, M., Candellano, K., Dewar, K., Diaz, J. S., Dodge, S., Ferrita, P., Fitzinghi, W., Geop, D., Galagan, J., Gardyan, S., Gordis, S., Goyette, M., Graham, L., Grand-Plerre, M. 2 (bases 1 to 141632)

TITLE

REFERENCE AUTHORS

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134 GAAACCAGGATCGAAGACAGGTCAGCAAAAAQAGAAAGAAACCAACGTTGAGAGGAATGGG 193
                                                                                                      by the finished sequence as soon as it is available and
the accession number will be preserved.

1 5483: contig of 5483 bp in length
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Local Similarity 56.0%; Pred No. 0.93; One 25: Indels 0;
Les 79; Conservative 0; Mismatches 62; Indels 0;
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43825 a 26738 c 26386 g 43579 t 1104 others
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83580 98402; contig of 14823 bp in length
                                                                                                                                                                                                                                 of 100 bp contig of 1105 bp in length of 100 bp contig of 1539 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                             8328 8427: gap of 100 bp
8428 11416: contig of 2889 bp in length
1147 11516: gap of 100 bp
11517 14028: contig of 3312 bp in length
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29510: contig of 9119 bp in length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14829 14928: gap of 100 bp 14929 20291: contig of 5363 bp in length
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                    provided by the submittor.
This sequence will be replaced
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6789 8327: con
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Hagos B. Heaford A. Horron L. Hulme W. Tilev I. Johnson R., Johnson S. Chandra, A. Karatasi A. Kells C. Labrocque K. Landrage K. Landrage G. Kamat. A. Karatasi A. Kells C. Labrocque K. Landrage G. Labrocque K. Landrage G. Marques M. Hatthess C. Kerden C. Mardonal D. Marques M. Hatthess C. Kerden C. Margonal M. Marques M. Hatthess C. Kerden M. Worbur D. Wickenan K. H. Worban K. H. O'Gonnor T. O'Donnol J. P. Wolf I. D. O'Donnor T. O'Donnol J. P. O'Donnol J. D. O'Donnor C. Marques M. Marloy R. Marques M. Wall D. O'Donnor C. Marques G. Schubback, R. Stanger Thomann M. Sordannia M. Yalley R. Marques G. Schubback, R. Stanger Thomann M. Marques G. 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Significants. Mashawa, C., Mander, E., Milla, Allen N., Adderson, S., Barran, M., Bastian, V., Bloom, T., Boguslawity, L., Campoptano, A., Chang, J., Chan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Burect Stabinssion Submitted (22-DEC-2001) Whitehead Institute/AIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA 18 (Dases 1 to 141632)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    submitted (02-APR-2002) Whitehead Institute, MATT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA on APP 2, 2002 hlis sequence version replaced 91:17977278.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Center: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Consensus quality, 119726 bases at least Q40
Consensus quality, 11011 bases at least Q30
Consensus quality, 11011 bases at least Q30
Consensus quality, 10105 bases at least Q30
Consensus quality, 10105 bases at least Q30
Consensus quality, 1000 bases, and page Q40
Consensus quality, coverage; u, u, n, Q20 bases, sum-of-contigs
Quality, coverage; u, u, n, Q20 bases, sum-of-contigs
Quality, coverage; u, u, n, Q20 bases, sum-of-contigs
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* are represented as runs of N. The order of the pieces

* is believed to be correct as given, however the sizes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequencing vector: Plasmid, n/s; 100% of reads
Sequencing vector: Plasmid, n/s; 100% of reads
Chemistry: Dye-terminator Bid Dye: 100% of reads
Assembly program: Phrap; version 0.960731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: sequence_submissions@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      All repeats were identified using RepeatMasker:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Center code: WIBR
Web site: http://www-seq.wi.mit.edu
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Center clone name: 305_C_1
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EFERENCE AUTHORS

'note="L1 repeat: matches 2983. .3169 of

match: ESTs: Em:AI818093 Em:AI279200 Em:T03740 Em:AI242746 /note="Cpd_island" /veitemee=not_apperlimental /oln(828 - 8070, 6673, 36924, 36951,37749, 38994, /918, 3925,4255, 42584,46831, 51301) /gene="ball4N13, 627, 8773,36924, 36951,37749, 38994, /join(8328, 8370,6627, 2673,36924, 36951,37749, 38994, /product="ba314N13.5 (syntaphilin (KIAA0374))" /note="match: cDNAs: Em:AB002372 Em:AF187733 Em:AK000373 /product="ball4N13.1 (novel protein similar to RAD21 (S. pombe) homolog (KIAAD078); //note="match: ESTS: Em.aL042518 Em.aL049037" /note="continues in Em:AL031665 as gene dJ545L17.2 (gene fragment dJ545L17.1) Em:H05310 Em:AW873638 Em:W15472 Em:AI342482 Em:AI221800 Em:T03417 Em:R38903 Em:AI285452 Em:W04515 Em:AI758880" /note="LIMEc repeat: matches 1731, .2007 of consensus" 4702. .5001 /note="LIMEc repeat: matches 1574. .1731 of consensus" 171. .247 / /note="LiM4 repeat: matches 2983. .3060 of consensus" repeat: matches 2739. .3049 of consensus" /note="Tigger2a repeat: matches 2. .398 of consensus" /note="LIME repeat: matches 465. .565 of consensus" 6110. .6232 /note="AluJo repeat: matches 1. .298 of consensus" 5002. .5161 /note="L2 repeat: matches 2265. .2748 of consensus" /note="AluJb repeat: matches 2, .132 of consensus" 6964. .7397 Anote="Alusx repeat: matches 1. .310 of consensus" (1880. .4701 .166 of consensus" /note="LiMEc repeat: matches 2007. .2681 of .51301) 15 copies 63 mer 93% conserved" 1803 2 copies 59 mer 95% conserved" 1289 /note="2 copies 59 mer 96% conserved" 1203. .2147 /note="15 copies 63 mer 93% conserved" 2 copies 59 mer 96% conserved" 2380 note="2 copies 63 mer 85% conserved" 1376, .2672 39118. .39225,42535. .42684,46851. /gene="bA314N13.5" /gene="d345L17.2" doin(<8627. .8733,38298. .>38394) /gene="d3545L17.2" /evidence=not_experimental join(<8627, .8733,38298, .38370) /gene="dJ545L17.2" note-"match: STS: Em:HS416L18T" /evidence=not_experimental join(8627. .8733,38298. .38394) /note="MIR repeat: matches 80. overlaps 5' end of gene .5" /codon_start=1 'note-"L1M4 8023. .8814 2167 .8022 Em: AB040905 4079 851 /note="2 /note-"2 2050. 2673. 7940. 444 255. 734. 3757 epeat_region epeat_region repeat_region repeat_region repeat_region repeat_region epeat_region epeat_region repeat_region repeat_region epeat_region repeat_region repeat_region repeat_region repeat_region repeat_region repeat_region misc_feature misc_feature gene gene mRNA mRNA CDS Direct Submission

Direct Submission

Direct Submission

Direct Submission

Calulista (06-EER-2001) Sanger Centre, Hinxton, Cambridgeshire,
Calulista (16-EER-2001) Sanger Centre, Hinxton, Cambridgeshire,
Calulista (16-EER-2001) Sanger Centre (16-EER-2001)

Order (16-EER-2001) Miss sequence version replaced (1:1045391)

Direct Submission

Order (16-EER-2001) Add (18-EER-2001) Sanger (10-EER-2001)

Note of the covertage of the overtage of the o Mapping Conour, Further information can be found a little dependence to the mission of the property. This sequence is not the entire insert of close Rections only once, except for a 100 base overlap.

Sections only once, except for a 100 base overlap.

Sequence and of close Rev 776F14 is at 118973 in this sequence. The true title end of close Rev 776F14 is at 118973 in this sequence. This sequence was either double-streaded or sequenced in regions were either double-streaded or sequenced with an ending and in the sequence and the confidence of th ALLISSES IN The PROFESSION TO THE PROPERSON THROUGH THE 1997 PROPERSON THAN THE PROFESSION TO THE PROFESSION THROUGH THE PROPERSON THROUGH THE PROPERSON THROUGH T covered by at least of one plasmid subclone or more than one Mill subclone; and the assembly was confirmed by restriction digast. PRIL-131MILL is from the library RECI-112 constructed by the group of Pieter de Jong. Por further details see Bikaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo. I (pases 1 to 11907) HTG; CpG island; FK506; FKBPlA; KIAA0078; KIAA0374; PBP1; RAD21; Scaffold protein; SDCBP; SITAC18; SYCL: syndecan; syntaphilin; was generated from part of bacterial clone contigs of human chromosome 20, constructed by the Sanger Centre Chromosome 20 http://www.chori.org/bacpac/home.htm /organism="Homo sapiens" /chromosome="20" /clone="RP11-314N13" /clone_lib="RPCI-11.2" 4. .184 /db_xref-"taxon:9606" Location/Qualifiers 73828 AGTCAAAGGCAGTTTATGAAT 73848 AL136531.16 GI:11139883 254 AGTCGGAGACACGTCATCAGT 274 .119072 VECTOR: pBACe3.6. Homo sapiens syntenin. AL136531 repeat_region uman.

Source

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Mayora, M. Richeraon E. Naskonkows, S. Oquil, Okwonin G. Corgone M. Potence M. Pacca, Patron M. Patron M. Petron J. Sondergen J. Petron J.
                                                                                                                                                                                                                                                                                              Rattus norvegicus clone GH230-83A9, *** SEQUENCING IN PROGRESS ***, of uncodered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                   Muzny, D.M., Adams, C., Adio-Oduola, B., Ali-osman, F.R., Allen, C.,
147 AAGACAGGTCAGCAAAAACAGAAACAAACCTAGAGGAGGAATGGGTGTAGCAAAGCTC 206
                                                                                                                                         Db 94212 GAAAGGAAGGAAAGGAAGGAAGGAAGGAA 94180
                                                                                                           207 GAGCGTCAGAGAATCGAAGAAGAAGAAGCAA 239
                                                                                                                                                                                                                                                                                                                                                                                                                  AC108536.3 GI:21730120
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Unpublished
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AC108536
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                                                                                                                                                                                                                                                                         /note="Alusx repeat: matches 35. .311 of consensus"
14167. .14289
                                                                                                      /note="i2 repeat: matches 2609. .2705 of consensus"
11132. .11210
/note="MIR repeat: matches 70. .146 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           //note="match: GSS: Em:AQ571501"
113417. 113464
//note="12 repeat: matches 2661. .2707 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="MIR repeat: matches 152. .236 of consensus"
15804. .15952
                                                   /note="MIR repeat: matches 96. .243 of consensus"
10612, .10700
                                                                                                                                                                                                                      /note="MIR repeat: matches 77. .150 of consensus"
13304. .13580
                                                                                                                                                                                                                                                                                                                                 /note="MIR repeat: matches 63. .185 of consensus"
14925, .15250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    //note="MIR repeat: matches 45. .140 of consensus"
16423. .16925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'note="MIR repeat: matches 36. .170 of consensus"
[7473. .17586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="MIR repeat: matches 21. .142 of consensus"
17687. .18175
/gene="dJ545L17.2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="MIR repeat: matches 13. .255 of consensus"
19325, .19534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="21 copies 10 mer tgtgtgtgtg 81% conserved" 19480. 19605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "note-"24 copies 10 mer gtgtgtgtgt 80% conserved"
19896. .20021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   conserved"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'note="MIR repeat: matches 2. .151 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
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4.3%; Score 41; DB 9; Length 119072;
Bast Local Similarity 54.2%; Pred. No. 1.6;
Matches 83; Conservative 0; Prismatches 70; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="17 copies 10 mer gtgtgtgtgt 82%
19651, .19776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                note="2 copies 63 mer 86% conserved"
19482. .19599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'note-"2 copies 59 mer 85% conserved"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   note="2 copies 63 mer 85% conserved"
19656. 19773
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19714. .19953
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19903. .20020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note-"match: GSS: Em:AQ593191"
16460. 16739
/gene-#d3545117.2"
/note-"match: GSS: Em:AQ826165"
17131. 17253
                                                                                                                                                                                                                                                                                                                                                                                                                      /note="match: GSS: Em:AQ080098"
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15394. ,15883
/gene="dJ545117.2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note-"match: GSS: Em:AQ792688"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="match: GSS: Em:AQ035031"
18362, .18639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene="dJ545L17.2"
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    YSDPQPHGHVPARK"
                                                                                                                                                                                                11358. .11431
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Submitted (31-134%-2003) imama Generica Sequencing Center. Department of Volecular and Human Genetics. Baylor College of Medicine, One Baylor Plaza, Housten, T. 77030, USA

3. (bases 1 to 203466) REFERENCE JOURNAL

> 87 AATAGCTCCGGCGAGATCCGGACAGAGACACTGAAGAGTCGTCGTCGGAAACCAGGATCG 146

Direct Submission
Submitted (13-JUL-2002) Human Genome Sequencing Center, Department
of Molecular and Human Genetics, Baylor College of Medicine, One
Baylor Plaza, Houston, TX 77030, USA
On Jul 11, 2002 this sequence version replaced gi:18846182.
Genome Center

33088: contig of 2197 bp in length

30892

Web site: http://www.hgsc.bcm.tmc.edu/ Contact: hgsc-help@bcm.tmc.edu Center: Baylor College of Medicine Center project name: GIYC Center code: BCM

NOTE: Stellanded insert size any diffect from sequence length (see http://www.hgsc.bom.tnc.edu/docs/Genbank_draft_data.html).
NOTE: This is a "overking draft' sequence. It currently consists of 66 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N. but the exact sixes of the apps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will

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ö 4.3%; Score 41; DB 2; Length 203466; 47.2%; Pred. No. 1.6; tive 0; Mismatches 140; Indels 0 Query Match
Best Local Similarity 47.29
Matches 125; Conservative

Db 155176 GGTGGGGTCAGTTCTCCTACTCTCAGAGCTACCTCTCCCATGATGTCTAGGC 155235 378 GGTGGAGTCGGGTCAGGTTATGATCGACCCGGTTATTCTCCATGGGGTTTTGTT 437 ò

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Geyer,A. and Schmidt,K.H.
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genetic organisation of the M protein region in human isolates.
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Geyer,A., Roth,A., Vettermann,S., Gunther,E., Groh,A., Straube,E.
                                                                                                            97 GCGAGATCCGGACAGAGACACTGAAGAGTCGTGGTGGGAAACCAGGATCGAAGACAGGTC 156
                                                                                                                                                                                                                        157 AGCAAAAACAGAAGCAACGTTGAGAGGAATGGGTGTAGCAAAGCTCGAGCGTCAGA 216
                                                          0; Gaps
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4.3%; Score 40.6; DB 9; Length 158717; 55.2%; Pred. No. 2;
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/db_xref="taxon:119602"
/clone_lih="plage M13 mp18(450)"
/clone_lih="plage M13 mp18(1000)"
/note="wound isolate"
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/db_xref="G1:2285985"
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/transl_table=11
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This sequence assembly data is compared from overlapping clones. Where differences are found these are annotated as variations regether with a note of the overlapping olone name. Note that the variation annotation may not be found in the sequence submission corresponding to the overlapping clone, as we submit sequences with only a small overlap as described above.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    as follows. An attempt is made to resolve all sequencing problems, such as compressions and repeats, but not necessarily within known monoted human repeat sequence elements (e.g. Alu). Where the sequence is ambiguous, there is an annotation using the 'unsure' feature key.

The following abheviations are used to associate primary accession meets given in the feature table with their source disclasses:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     http://www.sanger.co.k/Projects/C_elegens/worzepe_Trias sequence
carefured.compart of batterial close contists of human
chromosome 9, constructed by the Sanger Centre Chromosome 9 Mapping
Group. Further information can be found at
http://www.sanger.co.k/MSP/D/D-1
Park Cancer Institute by the group of pleter de Jong. For further
details see http://barpac.mad.buffalo.edu/
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                                                          Db 155236 AAGTAGTGGGCCAGTTCTACAGATACCTCAGACATCAACATGTCTCTGGGCCACAGCCCA 155295
                                                                                                                                                                  Db 155296 GACCAGAAATATCTGCTTGACCTTTGCTGCAACAGAACCCTGTAGCCAGAGGTCATGCA 155355
                                                                                                                                                                                                                                                                          Db 155356 CATGGATTTGGTCCCAGGGCAGCACGCCAGGAACTCACCATTGTCCCACATGCATC 155415
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (3.1-WAY-2000) Sanger Centre, Hinxton, Cambridgeshire,
Ello 18A, UK. E-mail enquirises: humquery@sanger.ac.uk Clone
requests: clonerequest@sanger.ac.uk
        438 GAGACCTCCTCCACTACTCATGAGCTCTCTACAATCTCAAATGCTCAAATGTTTAACGCT 497
                                                                                                                498 TCTTCCAATAATCGCTGTGACACTTGCTTCAAGAAGAAACGTTTGGATGGTGATCAGAAT 557
                                                                                                                                                                                                                        558 AATGTAGTTCGATCCAACGGTGGTGGATTTTCGAAATACACAATGATTCCTCCTCCGATG 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human DRA sequence from Clone RP11-131A5 on chromosome 942-1-22.33, complete sequence.
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/db_xref="taxon:9606"
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/translation="Markatykkysirkkiktogravavaltyvogaciyvokosm pysogsirvyhikpeecityvyddosilkekiksys isebebladasi akkedolsbike KLONIKOBSIALAGA MAYKHOGOLAENDISDIKEKLONIKDSKIALAE KKHORQDAENSOKIAMEKDODIKOLEKOKOIIMASSKGTARBICANYRKAKAVOPEAALK

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46182 a

BASE COUNT

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STLOACIANIQFNESERITYEDKTTTDVRDGACLQBYVQRAHLSSGSGLOLLAALFF
STROSLEDIADLETSLSTLKRLTYRYKYLKREGIKISTRPWYWGDBHFRLFYL
KYFRKPIPFREMPFABIINONNLERLIALAWYKQTDVPWYFALFOHIKTLSGVNLIRFQ
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FFTAAALAVMATAGVAAVVKRKEEN"
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866. 874
/gene="mgc"
/note="putative extended -10 signal"
941. 945
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/note="T-type 4"
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866, .2499
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/gene="rel"
4733. .>4826
/gene="rel"
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2661. 2666
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2693. 2698
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2758. 2761
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ÖLEBÖNKI SDASRQGLRRDLNASREAKKOLEAEHÖKLEEGNKI SEASRKGLRRDLDAS
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Genetic organisation of the M protein region in human isolates of
Typop C and G streptococci: two types of multigene regulator-like
(mgrC) regions
7012343 (6), 965-976 (2000)
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/strain="25287"
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Schmidt, K.H.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This sequence was generated from part of bacterial clone contigs of human crimonsome 6. constructed by the Sanger Centre Chromosome 6 happing Group. Further information can be found at http://www.sanger.ac.uk/HGP/Chr6
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The following abbreviations are used to associate primary accession undmers given in the feature table with their source databases:

Ban: Bend: Sev. SMISSPROT: Tr:, TREMBL, WP. WORNERS, Information
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human DNA sequence from clone RF3-39ER18 on chromosome 645-3-3-26.
Contains an RPL21 (608 Ribosomal protein L21) pseudogene, ESTs and ALD78664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence has been finished according to sequence map criteria as follows. In attempt is amed to resolve all sequence map cottlems as outherstone and repeats, but not necessarily within known annotated human expet sequence elements (e.g. All.), where the sequence is ambiguous, there is an annotation using the 'unsure'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Ammalla; Entheria; Primates; Catarrhini; Hominidae; Homo.
1 (pases 1 to 116688)
                                                                                                                                                                                                                                                                                                                                                                  3058 ATCAGATCTAAAGGAGAAATTACAGAATTTAAAGGACGATAAAAGTTTAGCTGAAGCGGG 3117
                                                                                                                                                                                                                                                                                                                                                                                                                                                 3118 TTATGCTAATTCTTATAAACATCATCAAGAACAACTTGCTGAAAAAGATAAAGATATC 3177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3178 AGATCTAAAGGAGAAATTACAGAACTTAAAGGACGATAAAAGTTTAGCTGAAGCGGGTTA 3237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3238 TGCTAATICTTATAAACATCATCAAGAACAACTTGCTGAAAAAGATAAACTTAATGCTGA 3297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (05-JAN-2000) Sanger Centre, Hinxton, Cambridgeshire, CB10 ISA, UK. E-mail enquiries: humquery@sanger.ac.uk Clone
                                                                                                                                                                                                                                                                                                                       644 ATCAGATCATCATCAGAGGAGCCAAGGTTTCCTTTATGATCATAGAATCGCTAGAGCAGC 703
                                                                                                                                                                                                                                                                                                                                                                                                                 704 TICAGITICIGCTICIAGIACIACIATIAAICCIIATIICAAGGAGGCAACAAATCAIAC 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      824 TGTGAAGGAGTACGAGTTTTTTCCGGGGAAATATGGTGAAAGAGTTTCAGTGGTGGCTAC 883
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On Aug 18, 1999 this sequence version replaced g1:5730246.
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                                                                                                                                                                                                                            4.3%; Score 40.4; DB 1; Length 4826; 47.9%; Pred. No. 2.3;
                                                                                                                                                                                                                                                                       0; Mismatches 126; Indels
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Homo sapiens.
Homo sapiens
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HSJ393E18
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19501. 19969 7.0ote—"LIPAL3 repeat: matches 5688. 6156 of consensus" 21288. 21428 7.0ote—"Caralles repeat: matches 2401. 2585 of consensus" 23524. 23792. on the Workerp database can be found at the Workerp KP3-193EL8 is from the library KFC-3 constructed at the Roseul Park Cancer fiscal the library KFC-3 constructed at the Roseul Park Cancer Littlether by the group of Peterar de Jong, For further details see /note="MER21B repeat: matches 102. .783 of consensus" 2634. .26325 /note="LTR43 repeat: matches 1. .602 of consensus" 29581. .26697 /note="MER21B repeat: matches 139. .633 of consensus" 32482. .32905 .2060 of consensus" /note="MERG6A repeat: matches 371, .478 of consensus" 44986. .44936 /note="LIRI repeat: matches 1. .222 of consensus" 40655. .41009 41321. .41386 .1130 of consensus" consensus .458 of consensus* /note="LIMD repeat: matches 0. .457 of consensus" 40380. .40612 This sequence is the entire insert of clone RP3-393E18 /note="1.1MCl repeat: matches 5175. .6251 of 1602. .16148 //note="1.1MA8 repeat: matches 6145. .6288 of complement(18366 .18884) .1133 of .817 of 5664. 4094 /note="match: GSS: Em:AQ082975" 5192-5223 mer ac 93% conserved" complement(6041. 6845) /note="FRAM repeat: matches -119. .40 of 11682. .11817 /note="68 copies 2 mer aa 62% conserved" 14518. .13974 /note="L1MD repeat: matches 1015. 30416. .30805 /note="LTR28 repeat: matches 760. 42944, .43199 /note-"LIM2 repeat: matches 1760. /note="LIMD repeat: matches 973. complement(31660. .31710) /note="MLflC repeat: matches 1. /note="match: GSS: Em:AQ503651" /note="match: GSS: Em:A0026748" 31295. ,31450 /note="match: GSS: Em:AQ816419" /note="match: GSS: Em: AQ425998" 2602. .2924 /note-"match: GSS: Em:AQ425996" /note="match: GSS: Em:AQ830740" 31791. .32278 /note="match: GSS: Em:AQ141736" 23795. .24479 /organism="Homo sapiens" /db_xref="taxon:9606" /chromosome="6" http://bacpac.med.buffalo.edu/ Location/Qualifiers /map="q25.3-26" /clone="RP3-393E18" /clone_lib="RPCI-3" 189. .571

Em. AA314199 Em. AA316991 Em. AA316991 Em. AA316991 Em. AA316991 Em. AA316999 EM. AA316799 EM. AA316799 EM. CASCO EM.	Duety Match	RESULT 14 ACC11974 ACC11974 DEFECTION NO. COLOUR REPLANCE, complete sequence. DEFECTION NO. COLOUR REPLANCES, complete sequence. ACCINESTON ACCIDINATION OF THE COLOUR REPLANCES. VERYMORE HOW Explains. ORCANISM HOW Explains. Anomalia: Intens. D. Liberia: Primares: Catarrhini: Hominidae: Homo. TITLE HOW Explains. ADVINORS DEFECTION REPLANCES. TITLE HOW Explains. TITLE HOW Explains. AND HOW EXPLAINS ACCIDENT OF THE COLOUR REPERON. AND HOW EXPLAINS ACCIDENT OF THE COLOUR REPERON. AND HOW EXPLAINS ACCIDENT OF THE COLOUR REPLANCES. AND HOW EXPLAINS ACCIDENT OF THE COLOUR REPLANCES. AND HOW HOW EXPLAINS ACCIDENT OF THE COLOUR REPLANCES. AND HOW EXPLAINS ACCIDENT OF THE COLOUR PROPERTY OF THE COLO	COXEG. P. Debetallano, K. Diedar K. Donlino, M. Donalani, L. Doyle M., Ferreit, C., Fulke, R., Gage D., Calegan J. Gardyna, S., Crant, C. Biggos, B., Heaford, A. Hortoni. Galegan J. Gardyna, S. Crant, C. Biggos, B. Heaford, M. Hortoni. Houland, J. C. Johnson, R., Jones, C., Rann, L., Kartess, A., Klein, J., Hahoczky, J., Lieu, C., Locke, K., Maddonald, P., Marquis, M., Weldrim, J., McDarn, P., McGhard, R., McChaughilin, J., Meldrim, J., McDrow, J., Maylor, J. McChard, R. O'Conoro, T. O'Donnal, P., Peterson, R., Pollara, W., Riby, R., No, M., Santos, R., Severy, P., Etanger Thomann, K., Follara, W., Riby, R., No, A., Santos, R., Severy, P., Charges, C., Maylor, J., Maylor, S., Sidnovic, R., Savis, Mandallan, A., Talahasa, J., Fritz, D. Lieer, Subman, K., Solanovic, R., Solanovic, R., Savis, M., Marker, J., Savis, M., Marker, J., Chardy, J., Chard, J., Chard, J., Chardy, J., Chard, J., Chard, J., Chard, J., Chard, J., Chard, Chardy, Chardy, Chardy, J., Chard, J., Chard, Chard, Chardy, Chardy, J., Chard, J., Chard, Chardy, Chardy, Chardy, J., Chard, J., Chardy,
repeat_region 45171. 45224 foots-127, 700183 2 mer ac 75% conserved" foots-127, 20137 foots-127, 20	g g d d	misc_teature complement 75094 . 75520)	/ Active - 4,5392181 g. (FPL2.) (60 g. R.) (Responsible process) (1.2) (Active - 4,5392181 g. (FPL2.) (60 g. R.) (Responsible process) (1.2) (Responsible process) (Respon

repeat_region STREEN, GADTS, CONGULER, HILDER, HIGH PARTIER, N. GARGER, P. GARGE Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Faro, S., Ferreira, P., Fitzflugh, W., Gage, D., Galagan, J., Gardyna, S., Gards, S., Gordf, S., Goyette, M., Graham, L., Grand Pierre, N., Center: Whitehead Institute/ MIT Center for Genome Research Center code: WIBR Contact: sequence_submissions@genome.wi.mit.edu /clone="RP11-15L5" /clone_lib="RPCI-11 Human Male BAC" Web site: http://www-seg.wi.mit.edu /organism="Homo sapiens" /db_xref="taxon:9606" complement(21, 389)
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repeat_region

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Anderson.Scanaria.N. Musbaum.C., Lander.E., Ali.A., Allen.N.,
Anderson.Scanaria.N. Musbaum.C., Congetalavia.C., Decorbo.
Congetal. Description.S., Compared. Congetalavia.C., Congetala
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Mammalia, Butheria, Rodentia, Sciurognathi; Muridae, Murinae, Mus.
11 (Dasses I to 180895)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99 GAGATCCGGACAGAGACACTGAAGAGTCGTGGTCGGAAACCAGGATCGAAGACAGGTCAG 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159 CANANACAGAAGAAACCAACGTTGAGAGGAATGGGTGTAGCAAAGCTCGAGGGTCAGAGA 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 153168;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Birren, B., Linton, L., Nusbaum, C. and Lander, E. Mus musculus, clone RP23-247L7
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complement(29095, 29414)/rpt family="MER58"
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complement'series
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complement(27760. .28067)
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Direct Submission on Direct Submission of Direct Submission Direct Submission of Submi Center: Whitehead Institute/ MIT Center for Genome Research Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Ye, W.J., Young, G., Zainoun, J., Zembek, L., Zimmer, A. and Zody, M.
Direct Submission MOTE: This is a 'working draft' sequence It currently consists of 7 contigs. days between the contigs of contigs. days between the contigs as are represented as tuns of M. The order of the pieces is balleved to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.
This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved. 1 11367: contig of 11367 bp in length 1138 11467: gap of 100 pp Consensus quality, 179813 bases at least 40
Consensus quality, 179810 bases at less 030
Consensus quality, 179810 bases at less 030
Consensus quality, 180141 bases at less 030
Insert size, 180000, sum-of-contigs
Insert size, 180025, sum-of-contigs
Ouality Coverage: 8, 1 no 20 bases; sum-of-contigs
Ouality Coverage: 8, 1 no 20 bases; sum-of-contigs http://ftp.genome.washington.edu/RM/RepeatMasker.html Conter Clove name: 247.L.7
Sequencing Summary Statistics
Sequencing vector: Plasmid; n/a; 100% of reads
Chomistry: Per-terminator Big Dye; 100% of reads
Assembly program: Pinrap; version 0.960731 Contact: sequence_submissions@genome.wl.mit.edu 16386 16485; gap of 100 bp 16486 47027; cont.go 73 30542 bp in length 47028 47127; gap of 100 bp 47128 107763; contig of 60636 bp in length 1468 12993: contig of 1526 bp in length 2994 13093: gap of 100 bp 3094 16385: contig of 3292 bp in length Web site: http://www-seq.wi.mit.edu Center project name: L22539 Center code: WIBR 16486 47028 47128 11468 TITLE TITLE REFERENCE AUTHORS COMMENT

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107764 107863: gap of 100 bp
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RGANISM	Arabidopsis thaliana
	Eukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta;
	Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
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ERENCE	1 (bases 1 to 592)
UTHORS	Rounsley, S.D., Field, C.E., Bass, S., Linher, K., Linher, K., Golden, K.
	, Berry, K., Granger, D., Suh, E., Wible, C., Adams, M.D. and Venter
	.00.
ITLE	A BAC End Sequence Database for Identifying Minimal Overlaps in
	Arabidopsis Genomic Sequencing. Update 3
OURNAL	Unpublished (1997)
MENT	Other_GSSs: T25H2OTF T25H2OTFB T25H2OTR
	Contact: Steve Rounsley
	Department of Eukaryotic Genomics
	The Institute for Genomic Research
	9712 Medical Center Dr., Rockville, MD 20850, USA
	Tel: 301 838 0200
	Fax: 301 838 0208
	Email: rounsley@tigr.org
	Sed primer: M13 Reverse

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/note="Vector: BeloBACII; Site_1: HindIII; Site_2: HindIII
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Tel: 301 838 0200
Fax: 301 838 0208
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B1.6%; Pred. No. 4.1e-77;
Live 0; Mismatches 2;

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    /organism="Arabidopsis thaliana"

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                                                                             Department of Eukaryotic Genomics
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B67977 508 bp DNA linear GSS 09-DEC-1997 T25H20TR TAMU Arabidopsis thaliana genomic clone T25H20, DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . (bases 1 to 508)
Rounsley, S.D., Fleld, C.E., Bass, S., Linher, K., Linher, K., Golden, K.,
Berry, K., Granger, D., Suh, B., Wible, C., Adams M.D. and Venter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermtophyta, Wagnoliophyta; eddicoryledons; orre eudocuts.
Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      763
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 860 TGAAAGAGTTTCAGTGGTGGCTACAACGTCGTCGTAGGTGATTGCAGTCCTAATAC 919
                                                                                                                                                                                                                                                                                                                                                                                529 AGAAGAAACGTTTGGATGGTGATCAGAATAATGTAGTTCGATCCAACGGTGGTGGATTTT 588
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                                                                                                                                                                                                                                                                                                                                              69;
                                                                                                                                                                                                                                                                                                  DB 17; Length 592;
                                                                                                                                                                                                                                           3 others
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                                                                          /organism="Arabidopsis thaliana"
                                                                                                                                                                                                                                                                                                  33.1%; Score 312.4; DB 17
82.1%; Pred, No. 9.9e-82;
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                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                     Produced by Rod Wing"
                  High quality sequence stop: 592
Location/Qualifiers
                                                                                                               /db_xref="taxon:3702"
                                                                                                                                                                             /sex-"hermaphrodite"
                                                                                               /strain="Columbia"
                                                                                                                                  /clone="T25H20"
/clone_lib="TAMU"
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                                                       1. .592
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B67977
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                                                          source
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B67977/c
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RH472100 RESULT 4 BH472100/c Ġ Brassica oleracea Bukaryota Viridiplantae: Streptophyta: Babryophyta: Tracheophyta: Bermatophyta: Magnoliophyta; eudicotyledons; core audicots; Rosidae: eurosida II; Brassicales; Brassicaceae; Brassica. GGACAGAGACACTGA---AGAGTCGTGGTCGGAAACCAGGATCGAAGACAGGTCAGCAAA 162 AACAGAAGAAACCAACGTTGAGAGGAATGGGTGTAGCAAAGCTCGAGCGTCAGAGAATCG 222 46 GAAACCCAAACGATCTTCTGAGAAACACCCGTCTTGTCGTCAATAGCTCCGGCGAGATCC 105 223 AAGAAGAAAAGAAGCAACTCGCCGCCGCCACAGTCGGAGACACGTCATCAGTAGCATCGA 282 ------GGAGCAACA 366 353 TTCCAAGCTACGGTGGTGGACCACAACACGTCTCTCGGAGGGTATACTCGAAGCAGGT 294 Gaps TGTTFAACGCTTCTTCCAAFAATCGCTGTGACACTTCAAGAAGAAAGGTTT 541
[1] 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 60; Ouery Match 19.3%; Score 182.2; DB 17; Length 641; Best Local Similarity 68.6%; Pred No. 6.5-4-3; Matches 587; Conservative 0; Mismatches 108; Indels 60; Matches 108. Email: cdtownetigr.org DNA is from a doubled haploid provided by Tom Osborn. Seq primer: TR 1 (bases 1 to 641) Town,C.D., Van Aken,S., Utterback,T. and Fraser,C.M. Whole genome shotgun sequencing of Brassica oleracea 9712 Medical Center Drive, Rockville, MD 20850, Tel: 301-838-3523 Fax: 301-838-0208 /organism="Brassica oleracea" /strain="TO1000DH3" /db_xref="taxon:3712" Location/Qualifiers Unpublished (2001) Other_GSSs: BOHUA43TF Contact: Chris Town Class: sheared ends Brassica oleracea. 1. .641 343 TCCCAAGCTCACTCG-155 Query Match ERSION EYWORDS OURCE ORGANISM source ASE COUNT RIGIN EFERENCE AUTHORS TITLE JOURNAL OMMENT 106 163 487 179 EATURES

LOCUS BE DEFINITION BG	BH472100 775 bp DNA linear GSS 13-DEC-2001 BÖHRSSTR BOHI Brassica oleracea genomic clone BOHIR55, DNA sequence.
ACCESSION BE VERSION BE KEYWORDS GS SOURCE BI	HH/22100 HH/72100.1 GI:17680211 PRUSSIC OLERGED.
REFERENCE 1 AUTHORS TO TITLE W	1 (bases 1 to 775) Town.C.D., Van Aken.S., Utterback.T. and Fraser.C.M. Whole genome shotun sequencing of Brassica oleracea
JOURNAL UI COMMENT OI	Unpublished (2001) Other-GSS: BOHHRSFE Contact: Chis Town
မြောင်းရိုင်း	TIGR 9712 Well-30 Center Drive, Rockville, MD 20850, USA. 19713 Well-301-638-323 Pax. 301-638-0208
	DRAIL: Guconfectigious DRAIL: Guconfectigious Seq primer: FRR s. Class: Neared ends.
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BASE COUNT ORIGIN	c 135 g 236 t
Query Match Best Local : Matches 11	th 15.milarity 6.3%, Score 59.4 DB 17; Length 775; Pred. NO. 2.8e-06; Pred. NO. 2.8e-06; 115; Conservative 0; Mismatches 61; Indels 9; Gaps 11; Conservative
760	ATGGAAGGAAACCCTAGAAATGGATCAG 81
345	GGAAGCCCTAGAAACGGAACAA 29
Oy 820 GAGG 111 Db 298 GAGG	ocoffordeadeadeadeaterraticoedeadeariveorgeadeadeadeadeadeade 879
880	CTACAACGTCGTCACTCGTAGGTGTATGCGTAATACCATTGATTTGTCCTTGAAGC 939
238	CTACATCAGTIGGIGATIGCAGTCCCGACACACATCCATCGATTGTCCTTGAGC 179
940	7
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RESULT 5 BE188445/c LOCUS DEFINITION P	645 bp mRNA linear EST 12-WAR-2001 PVB 292 L59-22 Litopenaeus vannamei CDNA similar to Penaeidin 2,
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SOURCE PROCE ORGANISM L.	white sh eus vann a, Metaz
ā	Eucarida; Decapo

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    Web: www.equeogue.crs.id.
    Web: www.equeogue.crs.id.
    Bublicemination of this BAC-end sequence was carried out as part of a collaboration with the Berkeley Discoplinal Genome Project (BDGP).
    Bublication with the Berkeley Discoplinal Genome Project (BDGP).
    Bublication with the Berkeley Discoplinal Genome Project (BDGP).
    Bublication of Library was greated May For Unture Information Pleases sea http://www.fruitfly.org/ The BDGP Discoplinal Companyage The DISCOPLINA CONTINUE OF The DEP DISCOPLINA CONTINUE OF THE
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//note="Organ: skin; Vector: pGW-SPORT6, Site_1: McI;
//inde="Organ: skin; Vector and inilitectionally. Primer: oligo df.
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Submitted (02-701-199) Genoscope · Centre National de Sequencage ·
BP 191 91006 EVRY cedex · FRANCE (E-mail : segrefégenoscope.cns.fr
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COMM. Library Preparation: Life Technologies, Inc.
COMM. Library Arrayed by The I. M. A.G. B. Consortium (LLML)
DNA Sequencing by: Incyte Genomics, Inc.
Consortium Communication: MCC Consortium/Luku at:
Consortium/L
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/db_xref="taxon:9606"
/clone="IMAGE:3916003"
/clone_llb="NIH_MGC_72"
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Grass, P.S. Bartlett, T.C., Browdy, C.L., Chapman, R.M. and Warr, G.M. Immune gene discovery by expressed sequence tag analysis of hemocycy'se and hepotponeroes in the Pearlic White Shrimp, L. Settieroes Litopeneaus vannames, and the Atlantic White Shrimp, L. settierus Dev. Comp. Immunol. 25 (7), 565-577 (2001)
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National Institutes of Health, Mammalian Gene Collection (MGC)
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Medical University of South Carolina
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NW. The Library is named APUT-19 and was constructed by partial good dispection of Drosophila DNA provided by the BOGP from the Reopelia Strain St. on be say, the same strain used for the BOGP's Part and BOGP is and EST libraries. A more detailed description of the library and how to order individual BAC clones, the entries library, or allithers for hybridization from the BACPAC Resource Center on be found at http://Despec.med.buffalo.edu/drosophila_bac.htm.

EATURES

/organism-"Drosophila melanogaster" /db_xref="taxon:7227" /clone="BACR14521" /clone_lib="RPCI-98" /note="end : TET3" source

4.3%; Score 40.8; DB 17; Length 937; 31.9%; Pred. No. 1.1; Query Match

299 others

363 t

87 g

ASE COUNT

ő GCTCCGGCGAGATCCGGACAGAGACACTGAAGAGTCGTGGTCGGAAACCAGGATCGAAGA 150 Gaps ó 62; Indels ; Pred. No. 1.1; 47; Mismatches 51; Conservative Best Local Similarity Matches

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BH154230 863 bp DNA linear GSS 24-SEP-2001 ENTRZ45TF Entamoeba histolytica Sheared DNA Entamoeba histolytica EFINITION ESULT 8 H154230 ocus

genomic, DNA sequence. BH154230 BH154230.1 GI:15725947 Entamoeba histolytica. CCESSION ERSION

Entamoeba histolýtica Eukaryota; Entamoebidae; Entamoeba. 1 (bases 1 to 863) ORGANISM

Loftus, B., Wang, Z., Van Aken, S. and Fraser, C. EFERENCE AUTHORS TITLE

JOURNAL

Determination of clone end sequences from Entamoeba histolytica manipuls and compared to the end sequences from Entamoeba histolytica manipuls made (2001)

Contact: Breadom J Lottus

Contact: Breadom J Lottus

The Instruct for Genomic Research

The Instruct for Genomic Research

The Instruct for Genomic Research

The State and State of the Contact of the Contact of the Contact Co Seq primer: M13-Forward DNA library

quality sequence start: 17 quality sequence stop: 751 Location/Qualifiers Class: shotgun High source

EATURES

/organism = Entamoeba histolytica = /strain-"HM1:IMSS"

"(db.xref-taxon:5795)

**Colone_11b="Entanoneba histolytica Sheared DNA"*
**Note="Weetor: pHOS; 514E_1 = 18 est: I, Constructed at The
Institute for Genomic Research (TIGR), Rockville, NO.
Genomic DNA isolated from broth oritures of E. histolytica
using a method described by Clark and Diamond (Clark,

method for isolate identification. Superplaced a method for isolate identification. Superplaced a method for isolate identification. Superplaced of size of its base inchancially side-side of give a tight size distribution (-2 kb). The v + 1 method use for the library construction is described in detail in Smith, H.O. and vener, J.C. (Making small lisert libraries for whole geneme shockun sequencial projects. In Genome Sequencial Approach, eds. W. Vaudin and B. Barell, oxford University Press, 1999). (1993) Entamoeba histolytica: and Diamond, L.S.

Length 863; DB 17; 473 Query Match BASE COUNT

110 AGAGACACTGAAGAGTCGTGGTCGGAAACCAGGATGGAAGACAGGTCAGCAAAAACAGAA 169 170 GAAACCAACGTTGAGAGGAATGGGTGTAGCAAAGCTCGAGCGTCAGAGAATCGAAGAAGA 229 632 AGAGAGAGAAAGAATAGAAGACTAAAAGCCACATGCTATAGAAATAATTAAAAGAAGAA 691 79; 4.3%; Score 40.6; DB 52.7%; Pred. No. 1.2; live 0; Mismatches 88; Conservative Best Local Similarity Matches

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752 AGATAAGAAACCCCAAGAGAGAGAATAAGAGACAATTAAGATGCAG 798

RESULT 9 AQ338133 LOCUS

DEFINITION

ACCESSION KEYWORDS

VERSION

GSS 06-MAR-1999 HS_5011_B1_D12_T7 RPCII1 Human Male BAC Library Homo sapiens genomic clone Plate=587 Col=23 Row=H, DNA sequence. linear 552 bp A0338133.2 GI:4342013 Homo sapiens AQ338133 A0338133 human

Eukaryota, Metazoa, Chordata, Craniata; Vertebrata, Euteleostomi, Mammalia; Eutheria; Primates; Catarrhin; Hominidae; Homo. P. (Dases 1 to 552)

ORGANISM

REFERENCE AUTHORS

Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T., Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D. and Sequence-tagged connectors: A sequence approach to mapping and On Feb 19, 1999 this sequence version replaced gi:4144149. Proc. Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999) Contact: Mahairas GG, Wallace JC, Hood L High Throughput Sequencing Center University of Washington scanning the human genome Hood, L MEDLINE

JOURNAL

TITLE

401 Queen Anne Avenue North, Seattle, WA 98109, USA Tel: (206) 616-3818 Exx: (206) 616-2887 Washington.edu Email: yeliacede from Research Genetics (info@resgen.com). BAC end Web Server: http://www.htsc.washington.edu Plate: 587 row: H column: Seq primer: T7 Class: BAC ends

/clone="Plate=587 Col=23 Row=H" /clone_lib="RPCIII Human Male BAC Library" /sex="Male" /organism="Homo sapiens" /db_xref="taxon:9606" High quality sequence stop: 552 Location/Qualiflers source FEATURES

275

BASE COUNT

/cell_type="Lymphocytes" /note="Vector: pBACe3.6: RPCIII Human Male BAC Library" 76 c 99 g 93 t 9 others

Matches

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ORIGIN

DEFINITION

RESULT 10

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ORGANISM ACCESSION

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SOURCE

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Note: supplier: Combination of untreated and Phytophtbora
infestrams-treated librarise of stolons, leaves, leaflets,
axillary bads of stem explants, petholes, germinating eyes
tubers, or rocks."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST 10-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST622756 Generation of a set of potato CDNA clones for microarray analyses mixed potato Lissues Solanum tuberosum CDNA clone STMIR50 A end, mRA Sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This clone is available through the Research Genetics, contact the Research Genetics for further information 1-800-711-6195 or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone_lib="Generation of a set of potato cDNA clones for microarray analyses mixed potato tissues"
/tissue_type="mixed tissues"
/lab_host="SOLR"
/lab_host="SOLR"
were sequenced. See keywords for description of this sequence and for the sequence of the other extremity of this insert.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           134 GAAACCAGGATCGAAGACAGGTCAGCAAAACAGAAGAACCAACGTTGAGAGGAATGGG 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   347 GGAANCTAAACGTAAGAWAGATGAGGWAAGAAAGAAGAAATTAGAGGAGCAACGTAGACG 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 40.4; DB 17; Length 859;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     407 IGAAGAAGAGCAGCAGCGTCAAACAAAGTTGAAAGAAGAAGCAGAAACGC 455
                                                                                                                                                                                                                                                                                                                                                          58 others
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                                                                                                                                         /organism="Zygosaccharomyces rouxii"
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/db_xref="taxon:4113"
/clone="STMIR50"
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                                                                                                                                                                                                                                                                                                                                                          174 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 1.4;
1; Mismatches
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The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            519 bp
                                                                                                                                                                    /strain="CBS 732"
/db_xref="taxon:4956"
/clone="AR0AA005A08"
                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                          165 g
                                                                                                                                                                                                                                                                             /clone_lib="AROAA"
/note="end : T3"
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BQ515341.1 GI:21374210
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.3%;
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                                                                                                                                                                                                                                                                                                                                                          132 C
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2. True Gaston Cremieux, CP 7706, 91037 RVR ecebx, FRANCE. (E-mail: 
2-grefégencoope.cns.fr - Web: www.genoscope.cns.fr)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CNS06CGK 859 bp DNA linear GSS 05-APR-2001
T3 end of clone AR0AA005A08 of library AR0AA from strain CBS 732 of
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Saccharomycetales; Saccharomycetaceae; Zygosaccharomyces.
I (Dasea I to 859)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Souciet,J.L., Aigle,M., Artiguenave,F., Blandin,G.,
Bolchir-Fukhara,H. Bon,E., Bottler,P., Casaregola,S.,
Ge-Montigny,J., Dujon,B., Durens,P., Lepingle,A., Llorente,B.,
Malpertuy,A., Neuveglise,C., Ozier-Ralogeropoulos,O., Potier,S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genomic exploration of the hemiascomycetous yeasts: 1. A set of yeast species for molecular evolution studies FRBS Lett. 487 (1), 3-12 (2000)
                                                                                                                                                                                                     86 CAATAGCTCCGGCGAGATCCGGACAGACACTGAAGAGTCGTGGTCGGAAACCAGGATC 145
                                                                                                                                                                                                                                                                       146 GAAGACAGGTCAGCAAAACAGAAGAAACCAACGTTGAGAGGAATGGGTGTAGCAAAGCT 205
                                                                                                                                                                                                                                                                                                                                                                                                                      Saurin, W., Tekala, F., Toffano-Nioche, C., Wesolowski-Louvel, M., Wincker, P. and Welssenbach, J.
                                                                                                                                         Gaps
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program of Lhitreen yeast species:
Saccharomyces bayanus var. uvarum,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 (bases 1 to 859)
Who Montiguy. Strab M., Potler, S., Tekala, F., Dujon, B.,
Wincker, P., Artiquenave, F. and Souciet, J.
Genomic exploration of the hemiascomycetous yeasts: 8.
                                                                                                                                   ö
                                                                 Length 552;
                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zygosaccharomyces rouxii, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GSS; clone AROAA005A08; RST AROAA005A08TP1.
                                                      Score 40.4; DB 17;
Pred, No. 1.1;
                                                                                                                                   71;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kluyveromyces marxianus var. marxianus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              206 CGAGCGTCAGAGAATCGAAGAAGAAAGAAGCAA 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    267 AGAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAA 300
                                                                                                                                   0; Mismatches
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FEBS Lett. 487 (1), 52-55 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kluyveromyces thermotolerans,
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Saccharomyces kluyveri,
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Candida tropicalis and
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                                                            4.3%;
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                                                                                                                                   83; Conservative
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                                                                                                  Best Local Similarity
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                                                                 Query Match
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Dikaryota: Vididiplantes Streepophte; Brotychbtz; Tracheophyta; Standardophyta: Waldiplantes Streepophte; Brotychbtz; Tracheophyta: Magnollophyta: Waldiplantes; Solanaceae; Brotycheae; March, Lawkorf, Tankaceae; Solanaceae; Solanaceae
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XMOT: Supplier: Combination of unitested and Phytophinora
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Pred. No. 2.8;
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Best Local Similarity 54.5%;
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Seq primer: T3.
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PPCAV35 5' sequence, mRNA sequence.
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The Interaction of The Phycophthora Contact. Cathy Rounding Passactor Challenged Cathy Contact. Cathy Rounding Research Fescatch Charles for Genomic Research Fescatch Genetics, Libraries Portione Info: plassac contact Research Genetics, Libraries Dystsion tel. 1:600-711-6195, Gmail Canadresgen.com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEMERAÇUE, VIZIAİPLARIGHE, SILVEÇLOPİNICE, REINÇYOPİNICE, TLACKIROPİNICE, SAREMIÇOPİNICE, TLACKIROPİNICE, GABINICE, CAMBONICE, CAMBONICE, CONTE GABINICE, GABINICE, CAMBONICE, CONTE GABINICE, CAMBONICE, SOLANICE, TO SARI
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4.1%; Score 39; DB 14; Length 519;
54.5%; Pred. No. 2.8;
tive 0; Mismatches 65; Indels
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/tissue_type="leaf"
/dev_stage="6 week old"
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/organism="Solanum tuberosum" /cultivar="Kennebec"

Location/Qualifiers

Seq primer: M13F-R.

EATURES

/db_xref="taxon:4113" /clone="PPCAV35"

/lab host-"SOLR"

linear

mRNA

522 bp

BI432782

EFINITION

CCESSION

ESULT 12 .1432782 OCUS

BI432782.1 GI:15257472

Solanum tuberosum

potato.

ERSION EYWORDS OURCE ORGANISM

EFERENCE AUTHORS JOURNAL

TITLE DMMENT

78; Conservative

Best Local Similarity Matches 78; Conserval

Query Match

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Conservative

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Another "Vectors plluserstpt II SK: Site.]: Rooms: Site.2:
MCDermort, combines Onns from Carlogo cells grown to mid-somplies Onns from Carlogo cells grown to mid-log phase in TAP (seetate-containing) medium in the mid-log phase in TAP (seetate-containing) medium in the simble. TAP medium in the anth. Hight. TAP medium in the anth. Hight. TAP medium in the mablest levels of CO2 and HS medium bubbled with 5% CO3. POLYM mRNA was purified from each sample, polode and CDNA synthesized. The CDNA was directionally cloned into lambda ADN II (Starzagene) in the EORI (5) and ADOI (3) sites. Pillusercity II SK plasmids were exclsed from the lambda ADN Corces by experimetrous with Rassists (Starzagene) phase: The library was normalized using method 4 described 67 a 270 c 350 g Gc to III Orbers.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chlamydomonas reinhardtii
Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unicellular System for Analyzing Gene Function and Regulation in Vascular Plants; project phase 2
                                                                                                                                                                                                                                                                                                                          08955706 1107 bp mRNA linear Esr 29-MAY-2
1024047604.XI C. reinhardtil CC-1690, normalised, Lambda Zap II
Chlamyddomisa reiinhardtil cDNA, mRNA sequence.
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Grossman, A. Davies, J., Federspiel, N., Hariis, E., Lefebvre, P.,
McDermott, J. P., Sililow, C., Stern, D. and Surzycki, R.
Analyses of the Chlamydomonas reinhardtil Genome: A Model,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100 AGATCCGGACAGAGACACTGAAGAGTCGTCGGAAACCAGGATCGAAGACAGGTCAGC 159
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/strain-"CC-1690 wild type mt+ 21gr"
/db_xref-"taxon:3055"
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Pred. No. 4.2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chlamydomonas reinhardtii.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (2000)
Contact: Charles Hauser
DCMB Box 91000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BG856706.1 GI:14237890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: chauser@duke.edu
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Durham, NC 27708-1000
Tel: 919 613 8159
Fax: 919 613 8177
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Matches 81; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This GOS is part of a random genomic sequencing program of thirteen was severely as a recommendation of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the con
                                                                                          CNS07AR0 1105 bp DNA linear GSS 08-JUL-2001
T3 end of clone BC0AA006B08 of library BC0AA from strain CBS 767 of
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KEM1 ; multifunctional nuclease ]
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Blankrycha. Phungi. Ascomycota. Saccharomycotina; Saccharomycetes;
Saccharomycetia. Saccharomycotaccae. Debaryomyces.
1. (bases 1 to 1105)
Souciet. J. L. Addle M. Artiquenave, P. Blandin. S.
Bolctin-Takhhara M. Bon. E. Brottier, P. Casaregola. S.,
de-Montigry. J. volyon B. Durenas, P. Casaregola. S.,
Malpertuy. A. Neuvezlise. C. Ozier-Kalogeropolios. D. Soutin. M. Taktala. F. Toffano. Monche. C. Soutin. M. Taktala. F. Toffano. Monche. C. Nesolowski-Louvel. M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genomic exploration of the hemiascomycetous yeasts: 1. A set of
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4.18; Score 39; DB 17; Length 1105;
Best Local Similarity 58.08; Pred. No. 4.1;
Marches 69; Conservative 0; Mismarches 50; Indels (Marches 79; Conservative 0; Mismarches 50; Indels (Marches 79; Conservative 0; Mismarches 70; Conservative 0; Mismarches 70; Conservative 0; Mismarches 70; Conservative 0; Mismarches 70; Indels (Marches 70; Conservative 0; Mismarches 70; Conservative 0; Conservative 0; Mismarches 70; Conservative 0; Conservative 0; Conservative 0; Conservative 0; Conservative 0; Conservative 0; Conservative 0; Conservative 0; Conser
                                                                                                                                                                                     Debaryomyces hansenii, genomic survey sequence.
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FEBS Lett. 487 (1), 3-12 (2000)
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/strain="CBS 767"
/variety="hansenii"
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FEBS Lett. 487 (1), 82-86 (2000)
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/clone_lib="BC0AA"
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                                                                                                                                                                                                                        AL436930.1 GI:12220343
                                                                                                                                                                                                                                                                                                                                                             Debaryomyces hansenii.
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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.

M protein - protein search, using sw model

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Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.
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01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Nuclear receptor coactivator AIB1 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            n 6.4%; Score 104; DB Similarity 23.5%; Pred. No. 2.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT; 1082 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAR-2001 (TrEMBLrel. 16, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-SPRAGUE-DAWLEY;
Bigsby R.M., Long X., Nephew K.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AEG03640; AAF53311.1;
FlyBase; FBgn0032528; CG16851
SEQUENCE 575 AA; 61004 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9EPU2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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Bukarytos Hetazos Arthropoda; Tracheata; Hexapoda; Insecta;
Pecrygota; Meopera; Endopterygota; Diptera; Brachycera; Muscomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VAKLERQRIEEEKKQLA-----AATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              104 ----QQQQQQQQQQQALGSLVPPAVTRIDISETLDDIN-----VQPSSVLQ-FGNSLP 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      210 SN------VDLNNLLKSNGKTPSSSCTGAFSR-----TPLSKIDMNL----- 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                71 PANTDAHNSSSNESSLVENSIL------ 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FMSTD-QNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQRQKKRPTLRGMG 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Adams W. D., Celniker S. E., Holf R. A., Forsta C. A., GOOGHW J. D.,
Ambarides P. G., Scherer S. E. Li P. W., Hoskins R. A., Galle R. F.,
George R. A., Levis S. E., Richerds S., Abhurrer M., Henderson S. N.,
Sutton G. G., Wortham J. R., Yandell M. D., Zhang O., Chen L. X.,
Brandon R. C., Nogers Y.-H. C., Blazel R. G., Champe W., Pefelfer B. D.,
Whit H. J. Doyle C., Baxter B. G., Welt G., Welson C. R., Millos G.L.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            --- PVISPWGFVETSSTTHELSSISNP-OMFNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     151 SEFLVASPEQFKEFLLDSPSTNFNFFHKTPAKTPLRFV-TDSNGAQQSTTENPGQQQNVF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNNRCDTCFKKKRLDGDONNYVRSNG------GGFSKYTMIPPPPMGYDOYLLOSDHH
                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 3; Length 554;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (JUL-1996) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Delius H., Hebling U., Hofmann B.;
Submitted (JUL-1996) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60522 MW; ICF99115F2B1F23D CRC64;
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01-NAY-2000 (TrameIrel. 13, Last sequence update)
01-NAY-2000 (TrameIrel. 13, Last annotation update)
02.051 protein.
                                                                  01.80V-1996 (TERMELLE). 01. Created)
01.80V-1996 (TERMELLE). 01. Last sequence update)
01.-01W-2002 (TERMELLE). 12. Last annotation update)
01.-01W-2002 (TERMELLE). 12. Last annotation update)
NUD1 0R YOR372C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----MFNQPLPTSPSKRFSSLSLTPYGRKILNDVG 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.78;
                                          554 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         37; Mismatches
                                                                                                                                                                                                                                                                                                              Saccharomyces cerevisiae (Baker's yeast).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6.7%; Score 109;
22.7%; Pred. No. C
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                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-20196006; PubMed-10731132;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; Z75280; CAA99703.1; -. SGD; S0005899; NDD1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63; Conservative
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                                    PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                          69 TSSEV--VKSTGSINNLH------DQSMVVSSQQGPWWFPANTTTTNQNSAFCFSSSNT 119
                                                                                                                                                                                                                                                                                                                                                                                133 QVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKRLDGDQNNVVRSN 192
                                                                                                                                                                                                                                                                                                                                                                                                                                           120 TTVSDQIVSLISSMSTSSSPTPMTSNPSPAPNNWEQLNYCNTV-----PSQSNSIYSA 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                173 FFG-NQYTEASQTMNNNPLVDQHHHHQDMKSWASE--ILHYTEHSQSSETVIEAEVKPD 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Drosophila melanogaster (Fruit fly).
Bukaryota, Metazoa, Afrinopoda Tracheata, Hexapoda; Insecta;
Bukaryota, Neotoca, Enforpoda Tracheata, Brachyoeta; Muscomorpha;
Pephydroides, Drosophilidae; Drosophila.
                                                                                         50; Gaps
                                                                                                                                               25 TRLVVNSSGEIR---TETLKSRGRKPGSKTGQQKQKKPTLRGMGVAKLERQRIEEEKKQL 81
                                                                                                                                                                                                          18 TRLPGRIDNEIKNFWNSCLKKKLRRKGI---DPTTHKPLITN-----ELQSLNVIDQKL 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          193 GGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSASSTTI------
                                   Length 276;
                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last annotation update)
                                                                                         41; Mismatches 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Last sequence update)
                          Query Match
6.3%; Score 103; DB 10;
Best Local Similarity 23.3%; Pred. No. 0.95;
Bactches 60; Conservative 41; Mismatches 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT; 1693 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAY-2000 (TrEMBLrel, 13, Created) MAY-2000 (TrEMBLrel, 13, Last seq 01-MAR-2002 (TrEMBLrel, 20, Last anno CG9176 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --NPYFNEATNHTGPMEE 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                230 IANYWRSASSSSSPNQE 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-BERKELEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CNGL OR CG9176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O9VXV8:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 8
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                                                                                                                                                                                                                                                                                               10;
                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      263 SSQDSKSPLGLYCEQNPVESSVCPSNSRDPPVTKENKENSGEASE----TPRGPLESKGH 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Arabidopsis thaliana (Mouse-ear cress).
Bukaryota, Viridiplantee, Streptopiyta; Embryophyta; Tracheophyta;
Viridiplantee, Streptopiyta; Rabidopiyta; Cree eudicots; Rosidae;
eurosids II; Brassicales, Brassicaceae, Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64 MGVAKLERORIE-------EEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVV 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGMSLSPSQSVQMLGSRTYGVADPSNTGQMAGARYGASSSVASLT------PGQS 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           112 LQGFPSSLGSNRIYC-----GGVGSGQVMIDDVISPWGFVETSSTTHELSSISNPQMF 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 148 LOS-PSSYOSNSYGLNMSSPPHGSPGLGPNQQNIMISPRNRGSPKMASHQFSPAAGVHSP 206
                                                                                                                                                                                                                                                                                                                                                     4 SLFFMSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPTLRG 63
                                                                                                                                                                                                                                                                                                                                                                                                                Kranz B.D. Denokamb W. Greco R. Jin H. Layva A., Melsaner B.C., Petroni K., Urzaingui A., Bewan M., Martin C., Smeekens S., Tonelli C., Parz-Ares J., Weissharz B., Tonelli C., Smeekens S., Para-Ares J., Weissharz B., Toner G., Weissharz B., Toner G., Weissharz B., Toner G., Smethologis G., Weissharz B., Toner G., Starling From Arabidosis thaliana."; Establization Corruction Worders (BY SHILARITY).

-1. SUBLIANTY: CONTAINS I WHE-LIKE DOMAIN.

EMBIL ARGOSTI, AGG 551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           --MNGYDQYLLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      207 MGSSGNTGSHSFSSSSLSALQ---AISEGVGTSLLSTLSSPGPKLDNSPNMN-INQPSKA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SDHHQRSQGFLYDHRIARAASVSASSTTINPYFNEATNHTGPMEEFGSYMEGNPRNGSGG
                                                                                                                                                                                                                                     Length 1082;
*PD98059 induces estrogen receptor-coactivator interaction and
                                                                                                                                                                                                                                ; Score 103.5; DB 11; Length; Pred. No. 5.9; 34; Mismatches 150; Indels
                                                                                                                                           reporter gene transcription.";
Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
EMBL: AF322244; AAG42837.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           165 NASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPP----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FAFOCDAFERICAGES DRUGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TrEMBLrel. 13, Last sequence update) (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 276 VKEYEFFPGKYGERVSVVATTSSLVGDCSPNTIDLS 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       319 KKLLOLLTCSSDDRGHSSLTNSPLDSNCKDSSISVT 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Putative transcription factor (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAY-2000 (TrEMBLrel. 13, Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00249; myb_DNA-binding; 1.
SMART; SM00395; SANT; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-CV. COLUMBIA;
MEDLINE=99056848; Pubmed-9839469;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA-binding; Nuclear protein.
                                                                                                                                                                                                                                     6.3%;
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PROSITE; PS50090; MYB_3; 1.
                                                                                                                                                                                                                                                                                           Conservative
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01-MAR-2002 (TrEMBLrel.
                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                                                                                           73;
                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                     Query Match
                                                                                                                                               NON TER
                                                                                                                                                                                                                                                                    Local
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Matches

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STRAIN-BERKELEY;
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Spieer E., Spraddling A.C., Stepheton M., Strong R., Sun B. Systrake R., Tector C., Turner R., Venter E., Mannd, H., Wang X., Wang Z.-Y., Massarman D.A., Meinstock G.M., Weissenhead, D.G., Milliams S.M., Woodgeg T., Worley K.C., Wu D., Yang S., Yoo Q.A., Yel J., Yeh R.-Y., Everet J. S.C., Zhan M., Zhang G., Zhao Q., Zheng L., Zheng H., Zhong F.N., Zhong W., Zhu S., Zhu S., Zhu X., Smith H.O., Zheng R.H., Zhong F.N., Zhong W., Zhu S., Zhu S., Zhu X., Smith H.O., The granden esequence of Drosophila melanogaster."; species 287:197-2195; G.D. Spring M. Zhou X., Zhu S., Zhu X., Smith H.O., The granden esequence of Drosophila melanogaster."; species 287:197-2195; G.D. Spring M. Zhu S., Zhu X., Sanda M. Shanga S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S., Angada S.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1023 LKSILKKLOMGGGOOEEAGPGTGTGAGAVMGTGSKVNSSASOKGO-GLPAEP--TLEGPP 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1148 VAFPFPVPIAPASGSVPLPLEPGVSNVWSPTLTLVTPTNSPQESFAFPAQLQGELGGHGT 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1208 GRCLVGGVGSASASMLPAGAGASASASASTSTSASYVVECSASSNQILHAQSTTDLNLNL 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        57 KKPTLRGMGVAKLERORIEEEKKOLAAATVGDTSSVASISNNATRLPVPVDPGVVLOGFP 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          163 MFNASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRS 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drosophila melanogaster (fruit fra
Persygeis, Metacas, Arthropoda, Tracheata, Hexapoda; Insecta;
Persygeis, Mooblera; Endopterygous Diptera; Brachycera; Muscomorpha;
Fpivetricidas, Drosophilitaes, Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stapleton M. Brokstein P., Horg L., Agbayani A., Carlson J.,
Clampe, M., Chavez C., Dorsett, V., Fartan D., Files E., George R.,
Gonzalez M., Guartin H., Lill P., Libo G., Miranda M., Mingall C.J.,
Nunco J., Pacleb J., Parcaga V., Park S., Phousinenavong S., Wan K.,
Vi C., Lewis S.E., Rubin G.M., Celniker S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1127 --NSSSH-------PSNN------SNSAYTCPPPP-----S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         223 QGFLYDHRIARAAS-----VSASSTTINPYFNEATNHTGPMEEF------GSYME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       117 SS------LGSNRIYCG-GVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        267 GNPRNGSGGVKEYEPPGKYGERVSVVATTS---SLVGDGS-----PNTIDLSLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77; Conservative 44; Mismatches 131; Indels 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 5; Length 1693;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182854 MW; 697857836975C4D4 CRC64;
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.
                                                                                                                                                                                                                                                                                                                                                                  Inteepro: Ipkn00595; cNMP_binding.
Inteepro: IPR001622; Mrthannel_pore.
Inteepro: IPR001626; Mrthannel_lore.
Pfam; PP00027; cNMP_binding; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SMART; SM00100; CNMP; 1.
PROSITE; PS00889; CNMP_BINDING_1; 1.
PROSITE; PS00889; CNMP_BINDING_2; 1.
PROSITE; PSS0042; CNMP_BINDING_3; 1.
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01-JUN-2002 (TrEMBLrel. 21,
                                                                                                                                                                                                                                                                                                                                         FlyBase; FBgn0029090; cngl
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01-JUN-2002 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1693 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best_Local Similarity
Matches 77; Conserva
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Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AY069310: AD13455-1. 4
EXQUENCE 406 AA: 43277 WM; 44763436CFC3B663 CRC64;
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ry Match	6.28;	Score 1	02; D	5;	6.2%; Score 102; DB 5; Length 406;		
c nocal Similarity 19:18; Fied. NO. 2; ches 71; Conservative 44: Mismatches 120; Indels 136; Ga	ative	44: Mism	otches	120	Indels	136;	Ga
Contract Conference of the Contract of the Con	mamarac	00000		.000	NOG IEGNAVA	DIAGIO	9

16; 73 RIEEEKKQLAAATVGDT---SSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIYCGGV 129 126 SIEELEADAAAEIITEDQVHEEVILSSNSSTESENEVNVNAIA------KAYAEGC 175 130 GSGQVMIDPVISP------WGFVETSSTTHELSSISNPQMFNASSNNRCDTC 175 176 FKK-KRLDGDQNNVVRSNGGGFSKYTMIPPPMMGYDQYLLQSDHHORS---QGFLYDHRI 231 236 VQAIRHLEGD--HLFADGSGGEKFG------OQONLQOHHOMSGVHHQOLQHHRL 284 SVSASSITINP 246 PNDLLRNTRLVVNSSGEIRTETLKSRGR-----KPGSKTGQQKQKKPTLRGMGVAKLERQ 72 176 TSSAAMLQPILQAAIKATPKVEVERIHEKIVKVKTEKHDLPSMQTAPHYQHSHRQNLETI 84 PREVIEHT-----DNFVRSEDLEELGGTVSYVEIDEMTGQQQ-232 ARAA----

390 -- LKQCRPGVI 398

PRELIMINARY; 09V406; Q9V406

631 AA

PRT;

Last sequence update)
Last annotation update) Created) (TrEMBLrel. 13, (TrEMBLrel. 13, (TrEMBLrel. 20, 01-MAR-2002 (TrEMBLrel. CrP protein, CRP OR AP-4 OR CG7664. 01-MAY-2000 01-MAY-2000

Pterygota; Neoptera; Endopterygota; Diptera; Brāchycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila Drosophila melanogaster (Fruit fly). Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta; Ephydroidea; Dro NCBI_TaxID=7227;

SEQUENCE FROM N.A.

MEDLINE-20196006; PubMed-10731132;

Andreas W.D. Centhker S.E. Holf R.A. Forns C.A. Googyne D. A. Address W.D. Centhker S.E. Holf R.A. A. Coogyne D. A. A. Coogyne G. A. Candreas S.E. Studence S.E. Astburner M. Henderson S.N. Stutton G.G. Wortman J.R. Yandell N.D. Zhang O. Chen L.X. Stutton G.G. Wortman J.R. Yandell N.D. Zhang O. Chen L.X. M. Stutton G.G. Wortman J.R. Yandell N.D. Zhang O. Chen L.X. M. Stutton G.G. Wortman J.R. Yandell N. D. Zhang O. Chen L.X. M. Man K.H. Doyle C. Baxer E.G. Hell G. Welson C.R. Mikhos G.L.G. Man M. H. J. A. Mandress Pichankoch C. M. Baldwin D. M. Ballow R.M. Basu A. Baxen E.G. Hell G. Welson C.R. Mikhos G.L.G. M. Ballow R.M. Basu A. Baxendale J. Bayraktzoglu L. Besishe S.M. Beeson K.Y. Bence P.V. Bhonder D. Bolchen W. R. Bouck J. Broketen P. Brottier P. M. Barts S.C. Merits P. Man M. M. Cherry J. M. Cawley S. Delke C. Devene C. Berry Cadle E. Center A. Chandra I. M. Cherry J. M. Cawley S. Delkhke C. Deveneport L.B. Davies P. Chondra I. M. Dodson K. Doup L.E. Downes M. Dugan Rock B. C. Dukov B. C. Dukov B. C. Dukov B. C. Dukov B. C. Dukov B. C. Dukov B. C. Dukov B. C. Barts M. M. Glusser K. M. Andreas Pathann T.J. Hernandez J.K. Horts S. W. M. Harriss N.C. Barts J. J. H. Gerg N.S. Galbert W. M. Glusser K. M. Harriss N.C. Harris D. Harris P. M. Harriss N.C. Harris D. Harris P. M. Harriss N.C. Harris D. Harris P. M. Harriss N. M. Harriss D. Harris P. M. Harriss N. M. Harriss D. Harris P. M. Harriss N. Harriss N. M. Harriss N.

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And Andreas P.C., Scheer S.E., Not. K.A., Evans C.A., Gocayne J.D., Andans N. D., Cehniker S.E., 1614 K.A., Evans C.A., Gocayne J.D., Andans N. D., Cehniker S.E., 1614 K.A., Evans C.A., Gocayne J.D., Andans N. D., Cehniker S.E., 1614 K.A., Evans C.A., Changer S.F., Changel S.E., An Sulface G. C., Scheer S.E., 1614 C., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter C.A., Changel N., Peter N., Changel N., Peter N., Changel N., Peter N., Changel N., Peter N., Changel N., Peter N., Changel N., Peter N., Changel N., Peter N., Changel N., Peter N., Changel N., Peter N., Changel N., Deckon N., Elevan N., Peter N., Changel N., Deckon N., Changel N., Dogan Rocha E., Center A., Changel N., Deckon N., Changel N., Dogan Rocha E., Changel N., Deckon N., Changel N., Dogan Rocha E., Changel N., Deckon N., Changel N., Deckon N., Changel N., Changel N., Dogan Rocha E., Changel N., Deckon N., Changel N., Dogan Rocha E., Changel N., Deckon N., Changel N., Dogan Rocha E., Changel N., Deckon N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Notherson D., Ander N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Changel N., Chang
                                                                                                                                                                 Drosophila malanogaster (Friti, Ind.)

Retaryota, MetaZoza, Arthropoda, Tracheata, Hexapoda, Insecta;
Preryota, Meoplera, Endoplengoda, Diplera, Brachycera; Muscomorpha,
Preryota, Propera, Drosophila, Drosophila,
                                                               Last sequence update)
Last annotation update)
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                                           Created)
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                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-20196006; PubMed-10731132;
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16,
17,
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                                   01-MAY-2000 (TrEMBLrel.
01-MAR-2001 (TrEMBLrel.
01-JUN-2001 (TrEMBLrel.
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                                                                                                                                                                                                                                                                    NCBI_TaxID=7227;
                                                                                                                  CG10600 protein.
                                                                                                                                                                                                                                                                                                                                                   STRAIN-BERKELEY
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No. Mester In D., Houseron R.A., Handand T.J., Weel M.-H., Ibeepwam C. A., Mandand T.J., Weel M.-H., Ibeepwam C. Chun R. M. Dallall M. Kalush F., Krapan G. H., Kee Z., Kennison J. M. Lasko P., Learland B. E., Kolling C. D., Kraft C., Krachtz S., Milb. D., Laiz Z., Lidang Y., Lin X., Lasko P., Learlang Y. C., Machado M.P., Mesherson D., Merkelos D. M., Markon M., Milbarian N.V., Mobarry C., Machado M.P., Mesherson D.L., Mesten D. M., Melson D.L., Messon D.L., Mosson D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L., Messon D.L
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73 RIEEEKKQLAAAIVGDT---SSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIYCGGV 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            351 SIEBELEADAAABIITEDQVHEEVILSSNSSTESENEVNVNAIA-------KAYAEGC 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            401 TSSAAMLOPILQAAIKATPKVEVERIHEKIVKVKTEKHDLPSMOTAPHYOHSHRONLETI 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461 VQAIRHLEGD--HLFADGSGGQEKFG------QQQNLQQHHQMSGVHHQQLQHHRL 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -- SVSASSTTINP 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    510 AQDAPLALTTTGKQHAALAELRPPLQLKSGGNKQVIITAKTAKDSGGLVSTSTSSTAVTP 569
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       570 TAIFKVOTTGGHGNGSHLPAGSSTGTIITGS--NGSGGAQQ-------LTITTS 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18 PNDLLRNTRLVVNSSGEIRTETLKSRGR----KPGSKTGOOKOKKPTLRGMGVAKLERO 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    King-Chones K, Arcege G, Lebmann M.; The Hellar-Loose Bind both in Vitro and In Vivo to SERP1 sites Required for Transcriptional Activation of the Drosophila Gene Sis-4.; Simulted (DWN-1999) to the EMBL/Geneank/PDEJ databases. Remil. Remis. Response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              176 FKK-KRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRS---QGFLYDHRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Pred. No. 3.7;
44; Mismatches 120; Indels 136;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 5; Length 631;
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Matches 71; Conservative
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SMART; SM00353; HLH; 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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68 KLERQRIEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIYCG 127 402 KTR----DEVSRQL---NFGDKVS-----NSKLMPSPAP-----KSSSGSN---- 435 358 VETKQEVDTEPTPVLSN---LIKTEAEIKTES------TEKPNKPLVNGEAIA 401 46; Gaps 8 MSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQGKQKRPTLRGMGVA 67 128 GVGSGQVMIDPVISPWGFVETSSTT----HELSSISNPQMFNASSNNRCDTGFKKRL 181 - :: DB 5; Length 1406; Indels 153642 MW; 928070CF036CF4D3 CRC64; 63; :: e

PRT; 1406 AA.

PRELIMINARY;

ID 09VJ42 RESULT 11 Q9VJ42

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Drosophila melanongsate (friit/frijat.e) Presyptis NetaZod; Arthropoda Tracheta; Hexapoda: Insecta; Perygota: Neoptera; Rodobergyota; Diptera; Brachycera; Muscomorpha; Epivdytoidea; Diosophilidae; Drosophila:

MEDLINE-20196006; PubMed-10731132;

SEQUENCE FROM N.A.

STRAIN-BERKELEY: NCBI_TaxID=7227

(TrEMBLrel. 13, Last sequence update) (TrEMBLrel. 17, Last annotation update)

Created)

01-MAY-2000 (TrEMBLrel. 13,

01-MAY-2000 (TrEME 01-JUN-2001 (TrEME CG17229 protein. CG17229.

PRELIMINARY: (TrEMBLrel.

09VCX1

13;

Pred. No.

25.2%;

Best Local Similarity

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16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             177 GN-NPLMAQNQSTANVMATKMYEERLKLPSQRDGLDEVSIKQRYGENAGQLLDSNEALLK 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     236 ASASGQSSGQILHGTVGGLSGSLQQVQSRSPQIPGPAQSIKTEMNPILT -- PRSAGPEGS 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      125 YCGGVGSGQVMIDPVISPW------162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      294 FIGVOGSNGAGNNLTLKGWPLTGLEQLRSGLLQQKSFVQNQQQLQOOIHFLTFQQQQQLM 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   211 -----OYLL--QSDHHQRSQGFLYDHRIARAASVSASSTTINPYFNEATNHTGPMEEF 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    410 KKKIAQQQQLLQQQSNSQQHPQ-----LQQPAVSSQQSQSNQFLQQEKPGIGTMP-- 460
                                                                                                                                             65 GV-----AKLERQRIEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGV 110
                                                                                                                                                                                                                                          111 VLQGFPSSLGSNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSN- 169
                                                                                                                                                                                                                                                                                      223 ------PLTANLSKAADVANVSAMVRAVGS--AALECRVIVGYLGTIEMPKOISHSSKL 273
                                                                                                                                                                                                                                                                                                                                          170 NRCDICEKKKRLDGDONNYVRSNGGGESKYIMIPPPMNGYDQYLLQSDHHQRSQGFLYDH 229
                                                                                                                                                                                                                                                                                                                                                                                       274 QTVRSCIRKLRQEKRQPTIV-----LMCITP-----DSLSLQSS----SGGVLATY 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71 RORIEEEKKOLAAATVGDTS-SVASISNNATRLPVP-----VDPGVVLQGFPSSLGSNRI 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16 GNPNDLLRNTRLVVN-SSGEIRTETLKSRGRKPGSKTGQQKQKKPTLRGM----GVAKLE 70
                                                6 FFMSTDQNSVGN-PNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPTLRGM 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patelitive floose development regulator LEUNI protein.
Orgas astiva (appoint caulture-group).
Barkaryota: Wiridiplantes Streptophyta: Embryophyta: Tracheophyta:
Spermatophyta: Wagnollophyta: Lillopsida: Poales: Poaceae;
                                                                                            112 PLISVNGLNVSKLPHETV--VQLIGNSFGSIRMOIAENY----YSDSSDEENAHATLRGQ
                                                                                                                                                                                             166 LLAASLRHKPRFLHHKAKLHRLRNSPQKKLNPPEAVEPHKSKSS-PDHPTLKPVLEDP--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sasaki T., Matsumoto T., Yamamoto K.; **Oryza sativa nipponbare(GA3) genomic DNA, chromosome 1, BAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 6.2%; Score 101; DB 10; Length 883; Best Local Similarity 21.7%; Pred. No. 7.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262 GSYMEGNPRNGSGGVKE---YEFFPCKYGERV--SVVATTSSLVGDCSPNT 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46; Mismatches 151; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                       230 RIARASVSASSTTINPYFNEATN -- HTGPMEEFGSYMEGNPRNGS 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    316 SSARLNFVSSSSESENRFFGLVTSAVHNTQIEE-----EYEPSAGS 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AP003216; BAB84838.1; -.
SEQUENCE 883 AA; 96745 MW; A836F089F471F560 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
1-JUN-2002 (TrEMBLrel. 21, Last sequence update)
36; Mismatches 119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76; Conservative
   72; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN-CV. NIPPONBARE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q852L8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 13
Q8S2L8
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   Matches
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MEMBLY MEANING TO CHINKER S.E. BOLT RAY, EVANS C.A., GOCONYE J.D.,
Adame N.D., CELINEER S.E., BOLT RAY, EVANDER C.A., GOCONYE J.D.,
Adame N.D., CELINEER S.E., BOLT RAY, EVANDER C.B.,
SULTION G.E., WORTHON J.B., YUNGELL W.D., Zhang O., Chen L.E.,
SULTION G.E., WORTHON J.B., YUNGELL W.D., Zhang O., Chen L.E.,
BERNOOM R.C., MERGER Y.-H.G., Change S.G., Change D.E.,
ADALL J.F., ADAPAGN A., An H.-J., Andrews Pleannoon C.R., WARLOS G.L.G.,
ADALL J.F., ADAPAGN A., An H.-J., ANDREWS P.E., CHANGE C.B.,
BERNOOM K.Y. BENDON B.Y., BERNOOM J., BENTAKENCOLU L., BEASIBOY E.M.,
BENDON K.Y. BENDON P.W., BENDON J., BENDARLE P., DESCHER Y.,
CHARTY J.M., GANLOS P.W., BENDON J., BENDARLE P., DESCHER Y.,
CHARTY J.M., CANING S.P., BENDON J., BENDARLE P., DESCHER Y.,
CHARTY J.M., CANING S.D., DANING C.G., PERTER C.R., BENDARLE B.C.,
CHARTY J.M., PRANCHELIS A.C.G., PERTER C.R., BENTON B.,
CHARTY J.M., PRANCHELIS A.C.G., PERTER C.R., BENTON B.,
CHARTY J.M., PRANCHELIS A.C.G., PERTER C.R., BENTON B.,
CHARTY J.M., PRANCHELIS A.C.G., PERTER C.R., BENTON B.,
CHARTY J.M., PRANCHELIS A.C.G., PERTER C.R., BENTON B.,
CHARTY J.M., BANLON B., SANDON B., J.M., HALLIS M.,
HARTIS N.L., BANLON B., SANDON B., MANNON C., SANDON J.A., MENTER D.,
JALLI M., NELLER F., KATPOR G.H., SE. X., KRIDD D.,
JALLI M., NELLE J.M., BONLON T.C., NECHOLA W., MENDER C.M., MENDER C.

DB 5; Length 729; Score 101.5; 6.2%;

Query Match

77759 MW; 368108B2545187BE CRC64;

PROSITE, PS50106; PDZ; 1. PROSITE; PS01179; PID; 1. SEQUENCE 729 AA; 77759

SMART; SM00228; PDZ; 1 SMART; SM00462; PTB; 1 Pfam; PF00595; PDZ; 1

InterPro; IPR001478; PDZ. InterPro; IPR000050; PID_domain. FlyBase; FBgn0038997; CG17229. EMBL; AE003739; AAF56034.1; -

HSSP;

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Kawacianyasi Y., Hino Y., Horikawa H., Jin-no K., Takahashi M., Sekine M., Raba S.-L., Ankai A., Kosugi H., Hosoyama A., Etuki S., Yoshizawa T., Vishijima K., Otsuka R., Nakazawa H., Takaniya M., Kato Y., Yoshizawa T., Tanaka T., Kudoh Y., Yamazaki J., Kushida N., Ogachi A., Ank K., Kushida N., Ogachi A., Callen T., Kikuchi H.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   245 GE-ISKIEKKKKFKVVVTAPSSTSISQLMLFIKKGLDALSIPYKSKDSIYGYPLSIEGGN 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----CGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQ 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         203 MSKDQNKVLE-----SFNTIRGGGKKVFVITSARGRGKSAVTGLGLA 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68 KLERQRIEBEKKQLAAATVGDISSVAS----ISNNATRLPVPVDPGVVLQGFPSSL-GSN 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 163 MFNASSNNRCDTCFKKKRLDGDQNNVV-----RSNGGGFSKYTMIPPPMNGYDQYL 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              353 --GYEGSGKAFLRYLKRILTTRKVSVMWQELIKPLRYAEGDPVEKWL-----YDTLL 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  403 LDAEPDEPPO-----NVSHVIYESANVEEIFND--DHK-LRQIYGILVTAHYRNNP 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  214 LQSDHHQRSQGFLYDHRIARAASVSASSTTINPYFNEATNHTGPMEEFGSYMEGNPRNGS 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 MSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQRQKRPTLRGMGVA 67
                                                                                                                                                                                                                                                         Archaea; Crenarchaeota; Thermoprotel; Sulfolobales; Sulfolobaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               304 FKVYYEIPEATLEDEGDLLVVDEAAAIGIG--YIDSAIKTWKKVVLVTTVH-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels 102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 767;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    274 GG------VKEYEFFPGKYGERVSVVATTSSLVGDCSPNTIDLSLK 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      451 NDIMIMADGVHHKIKTLSTLDGKY---IGVVQIAQE--GDLPDSLIDLALK 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Complete genome sequence of an aerobic thermoacidophilic charactemon. Sulfolobus tokodail strain?":
DNA Res. 8:121-140(2001).
EMBL: AP000989; DA667467.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1671A54EEAB75CA1 CRC64;
                                                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48; Mismatches 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00583; Acetyltransf; 1.
PROSITE: PS00445; FGGY_KINASES_2; UNKNOWN_1.
                                                                                                                      767 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.1%; Score 100;
19.9%; Pred. No. 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hypothetical protein; Complete proteome SEQUENCE 767 AA: 87237 MW; 1671A54E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Search completed: January 26, 2003, 00:05:52
Job time: 94 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IPR000182; GCN5acetyltransf.
                                                                                                                                                          Created)
                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR000577; FGGY_kin.
                                                                                                                                                     01-DEC-2001 (TrEMBLrel, 19, 01-DEC-2001 (TrEMBLrel, 19, 01-MAR-2002 (TrEMBLrel, 20, Hypothetical protein ST2357.
  245 -- NPYFNEATNHIGPMEE 260
                    323 IANYYWRSASSSSSPNQE 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 19.99
Matches 70; Conservative
                                                                                                                      PRELIMINARY:
                                                                                                                                                                                                                                                                                                                                             STRAIN-JCM 10545 / 7;
                                                                                                                                                                                                                                            Sulfolobus tokodail
                                                                                                                                                                                                                                                                                           NCBI_TaxID=111955;
                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                          PubMed-11572479;
                                                                                                                                                                                                                                                                              Sulfolobus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                   Q96Y10
                                                                                                                                        096x10;
                                                                                      RESULT 15
                                                                                                      096Y10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12
                                                                                                                                                                                                                 Arabidopsis thaliana (Mouse-ear cress).
Bukaryota, Viridiplandes, Streptophyta; Enbryophyta; Tracheophyta;
Bukaryota, Magnoliophyta, audicotyledons; core eudicots; Rosidae;
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             111 TRLPGRIDNEIKNFWNSCLKKKLRRKGI---DPTTHKPLITN-----ELQSENVIDQKL 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82 AAATVGDTSSVASISNNATRLPVPVDPGVVL---QG----FP---SSLGSNRIYCGGVGSG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               162 TSSEV -- VKSTGSINNLH------DQSMVVSSQDGPWWFPANTTTHONSAFCFSSSNT 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133 QVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKRLDGDQNNVVRSN 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     266 FFG-NOYTEASOTMNNNNPLVDQHHHHQDMKSWASE--ILHYTEHNOSSETVIEAEVKPD 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25 TRLVVNSSGEIR---TETLKSRGRKPGSKTGQQKQKKPTLRGMGVAKLERQRIBEEKKQL 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                213 TTVSDQIVSLISSMSTSSSPTPMTSNFSPAPNNWEQLNYCNTV-----PSQSNSIYSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193 GGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSASSTTI-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20;
461 --- VDGGMPNSFGGVDQTTKKRKKPGSSSGRANSSGTANTAGPSPSSAPST 508
                                                                                                                                                01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
01-AUR-2002 (TrEMBLrel. 20, Last annotestion update)
Arabidopsis thaliana transcription factor AYT84 (GB:X95297).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 369;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Score 100; DB 10; Length 36; Pred. No. 2.6; 42; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (APR-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "The A, thallana Genome Sequencing Project.";
Submitted (APR-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (APR-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          587C33635735DD02 CRC64;
                                                                                                                                                                                                                                                                                                                     SEGUENCE FROM N.A.
STRAIN-CV. COLUMBEA;
Davidson S., Rohlfing T., David M., O'Brian D.;
The sequence of A. thaliana F21BIO.*;
                                                                                                   369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR001005; Myb_DNA_binding.
                                                                                                                                   Created)
                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALGERTO, AFRONZOSO, MYD_MON_LONGER
SMART; SM00395; SANT; 2.
PROSITE; PS00037; MYB_1; 1.
PROSITE; PS00334; MYB_2; 1.
PROSITE; PS50090; MYB_2; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA-binding; Nuclear protein.
SEQUENCE 369 AA; 41794 MW;
                                                                                                                                   01,
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nes 59; Conservative
                                                                                                   PRELIMINARY:
                                                                                                                                   (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
STRAIN-CV. COLUMBIA;
Waterston R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-CV. COLUMBIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                      NCBI_TaxID=3702
                                                                                                                                   01-AUG-1998
01-AUG-1998
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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.

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Pred. No. is the number of results predicted by chance to have a core greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

/SIDS2/gcgdata/geneseg/genesegn-emb1/NA2002.DAT:*

SUMMARIES

Description	Arabidopsis thalia	Arabidopsis thalia	Arabidopsis thalia	Yeast AOD9604-asso	Human immune/haema	Human oestrogen re	Human oestrogen re	. Human cancer relat	Listeria monocytog
ID	AAA94065	AAA94067	AAA94066	AAH24065	AAK72360	ABQ87681	ABA90193	ABN64389	ABQ70984
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% Query Match Length DB	1302	4071	271	4590	9780	465237	465237	583	4604
Ouery Match	100.0	77.6	13.5	9.6	3.8	3.8	3.8	3.7	3.7
Score	944	732.8	127.4	37.2	36.2	35.8	35,8	34.6	34.6
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Ye D, Yang W, Sundaresan V, Xu J;

Simple tandem repe	CONA encouring number	-			Human immune/haema		Human foetal liver	Probe #701 for gen	Human brain expres				Probe #708 used to		Yeast AOD9604 asso	Human immune/haema		Human inflammatory	Human inflammatory	Drosophila melanog	DMp53 tumour suppr	Human immune/haema	Human ovarian canc	Human immune/haema	Nucleotide sequenc		Arabidopsis thalla	Human polynuclecti	DNA encoding novel	DNA encoding novel	DNA encoding novel	Polynucleotide enc	DNA encoding novel	C	Drosophila melanog
16 AAQ95196	AAS1635	-			2 AAK80080		22 ABA52442	22 ABA22235									•	22 AAH92170							AAF8041		_	_	-	23 AAS66695		AAS9990		23 AAS75793	23 ABL14983
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ALIGNMENTS

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Sporocyteless; spl; melocyte formation; plant sterility; seedless fruit; pollenless flower; Ds element; ss.
                                                               Arabidopsis thaliana sporocyteless spl coding sequence.
                                                                                                                                                                   /transl_except- (pos:146..148,aa:Lrg)
                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                              (MOLE-) INST MOLECULAR AGROBIOLOGY.
       AAA94065 standard; cDNA; 1302 BP.
                                                                                                                                                         /product= "SPL"
                                                                                                                                                                                                                                             99WO-SG00023.
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                                            30-JAN-2001 (first entry)
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                                                                                                            Arabidopsis thaliana.
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                                                                                                                                                                                                       28-SEP-2000.
                          AAA94065;
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AAA94065
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The present sequence computess the promoter and coding sequence for the Arabidopsis thallans sporcortelses (SPL) protein. This protein is involved in the formation of microsporcovytes in male plants and megasporcovytes in male plants and megasporcovytes in famale plants. The metant gene was isolated from a collection of transposants due to it make and from a fearl a steel to phenotype. The mutation is chaused by the insertion of the ps element between bases that and 412 of the gene, custing a 4 base pair (aplication). The them the steel to phenotype in plants or the pseudor that are pair and the steel the phenotype in the answer of the pseudore transport plants the think element mans then the man for the man and to produce transport plants in the intervent of seasons and a specific or the plants of the pseudore transport plants in the intervent of the pseudore transport plants in the intervent of the pseudore transport plants in the production of the pseudore transport plants in the production of the pseudore transport plants in the production of the pseudore transport plants in the production of the pseudore transport plants in the production of the pseudore transport plants in the production of the pseudore transport plants in the production of the pseudore transport plants in the production of the pseudore transport plants in the production of the pseudore transport plants in the production of the pseudore transport plants in the page of the pseudore transport plants and the production of the pseudore transport plants and the page of the pseudore transport plants and the production of the pseudore transport plants and the plants are plants and the production of the pseudore transport plants are plants and the production of the plants are production of the pseudore transport plants are producted transported transported transported transported transported transported transported transported transported transported transported transported transported transported transported transported transported transported t
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Arabidopsis thaliana sporocyteless spl promoter and coding sequence.
                                                                                                     GTACTACTATTAATCCTTATTTCAACGAGGAACAATCATACGGGACCAATGGAGGAAT
                                                                                                                                                                                  TTGGGAGCTACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGAGTACGAGT
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                                                                                                                                                                                                                                                                                                                                                                                                                     GTGATTGCAGTCCTAATACCATTGATTTGTCCTTGAAGCTTTAA 944
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                                                                                                                                                                                                                                                                           sporocyteless (SPL) protein. This protein is involved in the formation of microsporocytes in make plants and magasporocytes in female plants. The mutant gene was isolated from a collection of transposants due to its
                                                                                                                                                                                                                                                                                                                                                male and "Genale sterile phenotype. The mutation is counsed by the liseritom of the De stement between bases at la and 412 of the gene, cassing at base part duplication. The identification of the sterile phenotype in plants caused by the intertion of Chis element means that it can be used to produce transperic plants which contain the De stement can be used to produce transperic plants which contain the De stement antitience sequences of the gene, enabling the production of seedless fruits, polinitiess flowers and plants with a larger bloamss.
                                                                                                                                                                                                                                                   The present sequence is the coding sequence for the Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 TGGGGACTTCTCTTCTTCTTCAACAGATCAAAACTCGGGGAAGCCAAAGGATC 140
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                WPI; 2000-594578/56
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controlling transgenics

661 GGAGCCAAGGTTTCCTTTATGATCATAGAATCGCTAGAGCAGCTTCAGTTTCTGCTTCTA 720

larger biomass

Seguence 4071 BP; 1306 A; 742 C; 692 G; 1331 T; 0 other;

o	Query Match		77.68;	Score	732.8;	DB 21;	77.6%; Score 732.8; DB 21; Length 4071;	4071;			
m	est Loc	Best Local Similarity	83.2%; Pred. No. 1.1e-229;	Pred.	No. 1.1e	-229;					
Σ	atches	Matches 942; Conservative 0; Mismatches 2; Indels 188; Gaps	tive (); Mis	matches	,; ;;	Indels	188;	aps	5,	
5.	1	1 TGGCGACTTCTCTTCTTCATGTCAACAGATCAAAACTCCGTGGGAAACCCAAACGATC 60	TCTTCATG	CAACAG	ATCAAAAC	TCCGTC	GAAACCCA	AACGATC	09		
n	2691	2691 TGGGGACTTCTCTTCTTCTTCATGTCAAAACTCCGTCGGAACCCAAACGATC 2750	TCTTCATG	CAACAG	ATCANANC	TCCGTC	SGAAACCCA	AACGATC	2750		
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61 TTCTGAGAAACACCCGTCTTGTCGTCAATAGCTCCGGCGAGATCCGGACAGAGACACTGA

481 CTCAAATGTTTAACGCTTCTTCCAATAATCGCTGTGACACTTGCTTCA------529

1591 GGIATATATGTATATAACTGTTGATCTTATTTGATTTAACTGGTGGGTTTAGGGACCAAT 3650 ATCATAGAATCGCTAGAGCAGCTTCAGTTTCTGCTTCTAGTACTACTATTAATCCTTATT 3531 TCAACGAGGCAACAATCATACGGTACTAAGTATAGTCCATTTATTAATACTCATATATA -----GGGACCAAT TCAACGAGGAACAATCATAC 682 742 764

773 GGAGGAATTTGGGAGCTACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGA 832

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ACTOGTAGGTGATTGCAGTCCTAATACCATTGATTTGTCCTTGAAGCTTTAA 윱 δŏ

RESULT 3

AAA94066

BP. AAA94066 standard; DNA; 271 AAA94066;

(first entry)

30-JAN-2001

Sporocyteless; spl; melocyte formation; plant sterility; seedless fruit; pollenless flower; Ds element; ds. Arabidopsis thaliana sporocyteless spl Ds element sequence

Location/Qualifiers 60..63 misc_feature

Arabidopsis thaliana.

Ds element pair duplication due to base /*tag= a /note= "4 insertion" 134..137 misc_feature

/*tag= b /note= "4 base pair duplication due to Ds element insertion" 64..133 /*tag= misc_feature

W0200056907-A1

/note= "Ds element"

28-SEP-2000

99WO-SG00023. 22-MAR-1999; (MOLE-) INST MOLECULAR AGROBIOLOGY.

99WO-SG00023

22-MAR-1999;

ž Sundaresan V, Yang W, Ye D,

WPI; 2000-594578/56.

621

562 TAGITCGATCCAACGGTGGTGGATTTTCGAAATACACAATGATTCCTCCTCCTCCGATGAACG

controlling transgenics Sporcyteless nucleic acids and polypeptides, useful for sporcyte or melocyte formation in plants for producing that bear seedless fruits and/or pollenless flowers

Claim 4; Fig 1A; 65pp; English.

The present sequence computiess part of the confing sequence for the Arabidosis; thalians sportoytelses (SRD) protein containing the Ds element. This protein is involved in the formation of microsporocytes in male plants and megasporocytes in female plants. The mutant gene male plants and megasporocytes in female plants. The mutant gene due to its male and female sterile pienotype. The mutantion is caused by the insertion of the Ds alement between bases All and 412 of the generations prenotype in plants caused by the insertion of this element means that it can be used to produce transpent plants which contain their series elements to the specific on the used to produce transpent plants with a larger bloodution of security plants ease admitsence to the game, analling the production of security in the security of the generations and plants with a larger bloomass.

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originisms contribles polythuclebride according a procesh hornone fragment capable of stimulating the activity of hornone small purposes is. The growth incomes fragment prefer that the key enzyme in lipolysis) and shibiting acetyl CoA carboxylase (the key enzyme in lipolysis) and shibiting acetyl CoA carboxylase (the key enzyme in lipolysis) and shibiting acetyl CoA carboxylase (the key enzyments) and ship acetyl CoA carboxylase (the key enzyments) and ship acetyl CoA carboxylase (the key enzyments) and ship acetyl CoA carboxylase (but is enzyments) and ship acetylase (but is enzyments) and ship acetylase (e.g., weast), or an edulace practice and acetylase a framewhead product (e.g., weast), or an edulace plant or animal or cell thereof. Food or christ made wising methods of the irreduction are used to medity fathlase activities (in particular, the food or this).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or drink products may be used to treat or prevent obssity particularly numens, and may also be used to improve the far.lear trush of the livestrook raised for meat production. In the exemplification of the livestrook raised for meat production. In the exemplification of the livestrook raised for meat production. In the exemplification of the expressed in yeast, optionally fused (DM) from the FLAG epitope (AAR7)6535. The present sequence from described as a DMs equence from west in the sequence listing, but is not further referred to in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New organisms containing nucleic acid encoding a growth hormone thrament which medulates lipid metabolism are useful to produce dietary aids for obesity and in the meat production industry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         376 GTGGTGGAGTCGGGTCAGGTTATGATCGACCCGGTTATTTCTCCCATGGGGTTTTG 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     436 TIGAGACCTCCTCCACTACTCATGAGCTCTCTTCAATCTCCAAATCCTCAAATGTTTAACG 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               343 SNSTYRAYSNSTYSNSTYRAYSNSTYSNSTYTHHNYRAYSNSTSHGTNKTGATDTG 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    496 CTTCTTCCAATAATCGCTGTGACACTTGCTTCAAGAAGAAACGTTTGGATGGTGATCAGA 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to novel transgenic organisms useful in the production of functional food and drink products for the treatment or prevention of chestly via the regulation of lipfd metabolism. The
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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larity 14.8%; Pred. No. 0.53;
Conservative 126; Mismatches 155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 48-50; 54pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vaughan P;
                                                                                                                                                                                                                                                                                                                                                                                     99AU-0003875.
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                                                                                                                     330 GTGCTACAAGGCTTCCCAAGCTCACTCGGGAGCAACAGGATCTATTGTGGTGGAGTCGGG 389
                                                                                                                                          390 TCGGGTCAGGTTATGATCGACCCGGTTATTTCTCCATGGGGTTTTGTTGAGACCTCCTCC 449
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                                           Length 271;
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                                                                                Indels
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                                     13.5%; Score 127.4; DB 21; 98.6%; Pred. No. 2.6e-31; Live 0; Mismatches 1;
Sequence 271 BP; 57 A; 71 C; 69 G; 74 T; 0 other;
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10
                                                                                                                                                                                                                                                                                                                                                                                                                          AAH24065 standard; DNA; 4590 BP
                                                                                                                                                                                                                                                                                  450 ACTACTCATGAGCTCTTCA 470
                                                                                                                                                                                                                                                                                                        ACTACTCATGAGCTCTCTTCA 271
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                                                                                Matches 139; Conservative
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2000US-0234997,
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2000US-0246532
2000US-0229344
                     00-589-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-689-2000; 00-68
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08-NOV-2000;
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20-OCT-2000;
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08-NOV-2000;
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                          556 ATAATGTAGTTCGATCCAACGGTGGTGGATTTTCGAAATACACAATGATTCCTCCTCCGA 615
                                                             616 TGAACGCTACGATCAGTATCTTCAATCAGATCATCATCAGAGGAGCCAAGGTTTCC 675
                                                                                                                                                                           Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immune/haematopoietic antigen genomic sequence SEQ ID NO:27172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; gene therapy; vaccine; metastasis;
                                                                                                                                                                                                                                                      676 TITATGAICATAGAAICGCIAGAGCAGCII 705
                                                                                                                                                                                                                                                                                                          103 VHAAASVSRAKGDTRAKGDTDSYRAKGDTY 74
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1K72360/c
> AAK72360 standard; DNA; 9780 BP
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2000US-0217487
2000US-0217496
2000US-0218290
2000US-0220963
2000US-0220963
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2000US-0180628.
2000US-0184664.
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20000S-0209467.
20000S-0214886.
20000S-0215135.
20000S-0216647.
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2000US-0225214.
2000US-0225266.
2000US-0225267.
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2000US-0190076,
2000US-0198123.
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2000US-0225447
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2000US-0229343
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14-AUG-2000;
18-AUG-2000;
22-AUG-2000;
22-AUG-2000;
23-AUG-2000;
30-AUG-2000;
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17 - NOV - 2000; 17 - NOV - 2000; 17 - NOV - 2000; 17 - NOV - 2000; 17 - NOV - 2000; 17 - NOV - 2000; 17 - NOV - 2000; 17 - NOV - 2000;

17-NOV-2000; 01-DEC-2000; 01-DEC-2000; 17-NOV-2000; 17-NOV-2000;

17-NOV-2000;

05-DEC-2000; 05-DEC-2000; 05-DEC-2000; 08-DEC-2000; 08-DEC-2000; 08-DEC-2000; 08-DEC-2000;

06-DEC-2000; 08-DEC-2000; 11-DEC-2000;

Rosen CA,

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Human; oestrogan; receptor; oestrogen receptor alpha: cytostatic; osteopathic; cardiant; cancer; osteoparosis; cardiovascular disorder; obtoobsome 645-1; gene; ds.
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18941..19032
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replace(52901,A)
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                                                                                                                                                                                       Human oestrogen receptor alpha gene.
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replace(18783,T)
                     ABQ87681/c
ID ABQ87681 standard; DNA; 465237 BP.
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166228..166322
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19033..52817
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                                                                                                                AMK54951 to AMK64702 encode the human immune/haematopoletic antigen (1) amno coid sequences given in AMR2170 to AMM5120. (1) have cytostetic activity, and can be used in gene therapy and vaccine production. (1) proceedings and polymoletolotics and proceedings and expension. (1) proceedings associated with imappropriate (1) expression. For example, they may be used to treat disorders associated with damportation. (2) proceedings of a second of the appropriate (1) expression. For example, they may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of (1) by expression proceedings and expression of the used to product on (1). (1) Additionally, (1) populated as may be used to product as escreted (1), by increasing the cell to express the unclaim and patients and polymorical edited to prevent and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and contract and co
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                                                                                                                                     -0249265.
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2000us-0251990,
2000US-0249216
                                             2000US-0249218
                                                                  20000S-0249244
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nes 83; Conservative
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                        20000S
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/standard_name= "Single nucleotide polymorphism" 168002..168120

/*tag=

exon

1064 AAAAGATATTACTGCAAAATAAGCTTTACTATCTAACTTTACTAGTAATTTTTATTTTAA 1005

Query Match Matches

ŏ à 746 CGAGGCAACAATCATACGGGACCAATGGAGGAATTTGGGA 785

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. "Single nucleotide polymorphism" (5'site:YES,3'site:NO) (6)	- 'Single nuclectide polymorphism' G) - 'Single nuclectide polymorphism' (5'site:VES,3'site:NO)	eplace(170035, A) "tag a "ta	'Single nucleotide polymorphism'	'Single nucleotide polymorphism' 'Single nucleotide polymorphism' 'Single nucleotide polymorphism' 'Single nucleotide polymorphism' 'Single nucleotide polymorphism'
replace(166054,G /standard_name- /standard_name- /stage- /stage- /consplice (5 /consplice (5 /stage- /rage-	/standard_name- /standard_name- replace(16923.cd /stag.a /stag.a /stag.b /stag.b /stag.b /stag.b /stag.b	H / H / H / H / H	/ Atager a / Atager a / Atager a / Atager a / Atager a / Atager b	/ standard_name- / standard_name- / stage / stage / stage / standard_name- / st
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e. : " : "	/ Atandard agame 'Single nucleotide polymorphism' replace(1213.3.0) / tag	e e (e (e (e (e (e (e (e (e (e	/standard_name="Single nucleotide polymorphism" replace(\$5382.A) replace(\$5382.A) replace(\$5383.A) replace(\$5383.A) /standard_name="Single nucleotide polymorphism" /standard_name="Single nucleotide polymorphism" replace(\$6094.G) /standard_name="Single nucleotide polymorphism" replace(\$6094.G)	nucle	3.8%; Score 35.8; DB 24; Length 465237; larity 52.9%; Pred. No. 18; Conservative 0; Mismatches 87; Indels 1; Gaps
intron exon variation intron variation	variation variation variation variation	variation exon intro ration	r variation r variation r variation r variation	T variation T variation T variation T variation	Ouery Match Best Local Similarity Matches 99; Conser

GAATCGAAGAAAAAAAAGAACTCGCCGCCGCCACAGTCGGAAACACGTCATCAGTAG 276

217

99 Pp 03

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ABA90193;

RESULT 7 ABA90193/c

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polynucleotide is used as a probe in mapping and tissue profiling. The encoded polypeptide and antibodies to the polypeptide can also be used for therapeutic and diagnostic purposes. The polynucleotide is useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    with vytostatic activity. The polynucieotide is used to produce a polypeptide, to detect differentially expressed genes correlated with a anneatient of a mammalian cell and to inhibit tumour growth. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at the wiso Link-plub/published_pct_sequences.
                                                                                                                                                                                    New nucleic acid for producing a polypeptide, detecting differentially expressed genes correlated with a cancerous state of a mammalian cell,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             invention relates to an isolated polynucleotide (ABN27253-ABN33262)
217 GAATCGAAGAAGAAAGAAGCAACTCGCGGCGCCACAGTCGGAGACACGTCATCAGTAG 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Randazzo F;
I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         103 TCCGGACAGAGACACTGAAGAGTCGTGGTCGGAAACCAGGATCGAAGACAGGTCAGCAAA 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; cytostatic; gene expression; gene mapping; tissue profiling;
                                                       157 AGCAAAACAGAAGAAACCAACGTTGAGAGGAATGGGTGTAGCAAAGCTCGAGCGTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Reinhard C,
ot D, Labat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human cancer related polynucleotide SEQ 1D NO 4356.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Garcia PD, Sudduth-Klinger J, Reinha
oott EM, Zhang G, Kassam A, Pot D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene therapy; cancer; tumour; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA; 583 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-AUG-2001; 2001WO-US25840.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CHIR ) CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-241905/29
                                                                                                                                                                                                                                                                                                                                                                                                                                        ABN64389 standard;
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                                                                                                                                                                                                                                                                                                              2689 ATTGGAT 2683
                                                                                                                                                                                                                                                               277 CATCGAT 283
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lamson G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABN64389;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes an inclused people (1) consisting of an amino acid sequence elected from: (a) the amino acid sequence of a working the description receptor diphe (SER-dibb) procted in AAG6921; or (b) a frequent comprising at least 10 contigous amino acids of the protein in AAG6921. (1) has eyclosteric, estephitic, cataldant and vascingtopic acitivities, and can be used in gene therapy and vaocine production. (1) is useful for identifying an agent that binds to (1), by contacting (1) with an agent and assaying the contacted mixture to expecting (1) with an agent and assaying the contacted mixture to peptida. A polymorleocide (11), encoding (1) is useful in the development of dispositics and theraphess for dispositic and disposited and issued as mediated/modified (11), is subject in the compact of dispositics and theraphess for dispositic and assaying the seases and disposites.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diseases. The human ESF-alpha gene is located on chromosome 6. The present sequence represents the human ESF-alpha gene, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel variant of estrogen receptor alpha polypeptide useful for decembing the ablogical activity of a protein for high throughout screening and for raising antibodies that elicit an immune response in screening and for raising antibodies that elicit an immune response in
   2749 GAAAGAAAAAAAAGAGAAAGAAAGAAAAAAGAAAAAAGAAAGACATAAATCTTCATGAC 2690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                synaptic nuclei expressed gene 2; haplotype; cytostatic; osteopathic; cardiant; vasotropic; gene therapy; vaccine; cancer; osteoporosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97 GCGAGATCCGGACAGAGAGACACACAGAGAGTCGTGGTCGGAAACCAAGGATCGAAGACAAGGTC 156
                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; oestrogen receptor alpha; ESR-alpha; ER; chromosome 6; Syne-2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene therapy for treating cancer, osteoporosis and cardiovascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 24; Length 465237;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cardiovascular disease; oestrogen receptor; ds.
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12.9%; Pred. No. 18;
.ve 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example; Fig 1 page 1-93; 333pp; English.
                                                                                                                                                                                                                                                                                                                                                                                     Human oestrogen receptor alpha gene.
                                                                                                                                                                                                                                ABA90193 standard; DNA; 465237 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-183756P.
2000US-0692414.
2001US-0768184.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-FEB-2001; 2001WO-US05358.
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Conservative
                                                                                                                                                                                                                                                                                                                                      (first entry)
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2002-041152/05.

WPI:

P-PSDB; AAG68251

(PEKE) PE CORP NY

24-JAN-2001; 22-FEB-2000; 20-OCT-2000;

WO200162969-A2. Homo sapiens.

30-AUG-2001,

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Best Local Similarity Matches 99; Conserve

Matches

Query Match

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99 GAGATCCGGACAGAGACACTGAAGAGTCGTCGGAAACCAGGATCGAAGACAGGTCAG 158
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AMP05196 is a simple tandem repet, (STR) corresponding to walds: The STR cean be used for treatment and diagnosis in human and veterinary medicine, partic. for openetic characterisation, mepping, linkage studies and analysis/diagnosis of acquired disease allelas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Identifying simple tandem repeat loci in DNA - by screening DNA library to enrich for fragments contig. the repeats before cloning and rescreening, this simple trandem repeats for treatment or
                                                                                                                                                                                                                                                                                                                                                                                                      Simple tandem repeat, STR, wglg5; treatment; genetic; diagnosis; characterisation; mapping; linkage studies; analysis; alleles; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 494 BP; 223 A; 72 C; 140 G; 44 T; 15 other;
                                                                                                                                                                                                                                                                                                                                                                  Simple tandem repeat (STR) corresponding to wglg5.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      219 ATCGAAGAAGAAGAAGCAACTCGCC 245
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                                                                                                                                                                                                                             AAQ95196 standard; DNA; 494 BP
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                                                                                                                       4230 CGATGTACC 4238
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                                                                               931 CCTTGAAGC 939
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                                                                                                                                                                                                                                                                                                                    08-FEB-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnosis
                                                                                                                                                                                                                                                                            AAQ95196;
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ID AAS1635
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4051 CAAAAAACGTTAACGAAACAGCTGACGATTTGGCGAGACAGTATGAACGAAGCGCTTGAG 4110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4111 ATGCTTGAAAGTGAAGACGCGAGTTCTATATATGCCTTTTTTGATGGGGCAAAGAATTT 4170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          811 ATGGATCAGGAGGTGTGAAGGAGTACGAGTTTTTTCCGGGGAAATATGGTGAAAGAGTTT 870
                163 AACAGAAGAAACCAACGTTGAGAGGAATGGGTGTAGCAAAGCTCGAGGGTCAGAGAATCG 222
                                              of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New genomic sequences from Listeria species, useful for detection, treatment and prevention of infection, also related polypeptides,
                                                                                                                                                                                                                                                                                                                                                                                                                              Antibacterial; Listeria; food contamination; mutational analysis;
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Note: The sequence data for this patent did not form part
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                                                                                                                                                                                                                                                     ABQ70984 standard; DNA; 4604 BP
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(CNRS ) CNRS CENT NAT RECH SCI.
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                                                                                                      AAGAAGAAAGAAGCAA 239
                                                                                                                                    250 AAGAAAGAAAGAA 234
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     infection; ds
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871 CAGTGGTGGCTACAACGTCGTCACTCGTAGGTGATTGCAGTCCTAATACCATTGATTTGT

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Indels

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HIV; human immunodeficiency virus; cachexia; erythema nodosum lepromatum;
borreliosis; meningococcal septicaemia; cancer; Human; Itk; ss;
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                                                                                                                                                                 Immunosuppressive; antiinflammatory; osteopathic; antirheumatic;
antiarinfitic; dermatological; antipsorfatic; antiashmatic; cytostatic;
antiarit; antiarierioscletoric; vasotropic; cerebroprotective;
                                                                                                                                                                                                                                                                        neuroprotective; nootropic; ophthalmological; immunosuppressive;
hepatotropic; virtodie; anti-HIV; immunomodulacor; antitryotd; sepsis;
septic shock; inflammation; crohn's disease, rheumatoid architits;
                                                                                                                                                                                                                                                                                                                                                                              Leukopaenia, ostoaarthritis; spondyloarthropathy;psoriatic arthritis;
server exceroid restant asthms; pulmonary fibrosis; mycorditis;
atherosclerosis; angina; vasculitis; reperfusion injury, infortion;
stroke, multiple sclerosis, Alizbeiener's disease Graves ophitalmopathy;
psoriasis; transplant rejection; acute alcoholic hepatitis; fibrosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Treating condition associated with cytokine production in a mammal, e.g. septis, septic shock, inflammation and foron's diseases, comptises administering an inhibitor of a member(s) of the Tec family of protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to the use of inhibitors of the Tec family of
                                                                                                      Human cDNA encoding partial protein tyrosine kinase, Itk.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antibacterial; protein tyrosine kinase.
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                          18-DEC-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Ubiquitin C-terminal hydrolase 10 polypeptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invantion relates to the isolation of human ubiquitin creaminal hydroissell to hypeptide and the polyunelectide sequence encoding it. The hypeptide can be used for acteening minutes, agonists, arrepoints or inhibitors. Of in peptide fidesprinting segments, arrepoints or inhibitors. Or in peptide fidesprinting free polymerication can be used as primes for an invalid and implification reaction on as probes for a hypridisation reaction, or in producing gene chips or microarray. The human thightith Creaminal hypriassel polymericated and the encoding polymerication cannow and the encoding polymerication for an interdering polymerication cannow in himsing polymerication for an interdering polymerication cannow in himsing and treatment of infection immunocletication virus (HIV) infection, immunocletication in the diagnosis and treatment of infection immunocletication in the diagnosis infinancial discretes in persent sequence encodes for human ubiquiting creaminal hydroises 10.
                                                                                                                                                                                            Human; ubiquitin C-terminal hydrolase 10; malignant tumour; haemopathy;
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                                                                                                                                                                                                                                  HIV infection; human immunodeficiency virus; cytostatic;
immunological disease; inflammation; virucidal; immunomodulatory;
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3.6%, Score 34.2; DB 24; Length 1292;
Best Local Similarity 60.0%; Pred. No. 2.6;
Matches 57; Conservative 0; Mismatches 81; Indels 0;
                                                                                                                                 cDNA encoding human ubiquitin C-terminal hydrolase 10.
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                                                                                                                                                                                                                                                                                                        antiinflammatory; haemostatic; ss.
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                                                     14-FEB-2002 (first entry)
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P-PSDB; AAU10685.
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                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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and TMFLajna ockocarthritis, spondyloarthopathy psoriatic arthritis, severe steroid resistant asthma, pulmonary fibrosis, mocarditis, atheroocciensis, angina with high GRP/IL-6, vasculitis, reperficison injury, infarction, stroke multiple sclerosis Althenmes's disease, Graves ophthalmopathy, psoriasis, transplant rejection, acute alcoholic fingility in the conditions for which inhibitors of Tec family were save has east include it when the manifest of the family in section is the conditions for which inhibitors of Tec family in section in the manifest of the conditions for which inhibitors of Tec

g ò ŏ AAS14049 standard; cDNA; 4221 BP.

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meningococcal septicaemia, cancer, such as breast cancer, ovazian cancer or colon cancer. Many other examples of diseases are given in the specification. The present sequence encodes human itk.
                                                                                                                                                                                          2080 AFFICTATTTTTTTTTTTTTTTTTAACATGAATCTAAAGTTTATGGTTCCAGGGACTTTT 2139
                                                                                                                                                                                                                                              2140 TATTTGACCCAACAACACAGTATCCCAGGATATGGAGCAAGGGAACAAAGAGGTAGAG 2199
                                                                                                                                                             720 AGTACTACTATTAATCCTTATTTCAACGAGGCAACAATCATACGGGACCAATGGAGGAA 779
                                                                                                                                                                                                                             780 TTTGGGAGCTACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGAGTACGAG 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; immune; haematopoietic; immune/haematopoietic antigen; cancer; cytostatic; gene therapy; vaccine; metastasis; ds.
                                                                                                                             Gaps
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                                                                         Best Local Similarity 52.4%; Pred: No. 4.9; Matches 75; Conservative 0; Mismarches c.
                                                               Sequence 4221 BP; 1159 A; 913 C; 991 G; 1158 T; 0 other;
                                                                                                                                                                                                                                                                                                           2200 TCTTTTCCAAGAAACTGGTGA 2222
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2000US-0180628.
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2000US-0225266.
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2000US-0225447.
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2000US-0225758
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AK80081
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20000S-0237038. 20000S-0237039. 20000S-0237040. 20000S-0239935. 20000S-0239937.

29.58F-2000 62.00T-2000 62.00T-2000 62.00T-2000 62.00T-2000 63.00T-2000 63.00

2000US 0240960. 2000US-0241781. 2000US-0241786. 2000US-0241786. 2000US-0241809. 2000US-0241809. 2000US-0241809. 2000US-0241809. 2000US-0241809. 2000US-0246177.

2000US-0246476. 2000US-0246477. 2000US-0246478. 2000US-0246523.

08-NOV-2000;

20000US-0246524 2000US-0246525 2000US-0246526 2000US-0246527

08-NOV-2000 08-NOV-2000

2000US-0246528. 2000US-0246532. 2000US-0246609. 2000US-0246610.

2000US-0236327. 2000US-0236367. 2000US-0236368. 2000US-0236369. 2000US-0236802. 2000US-0236802.

2000US-0234998 2000US-0235484. 2000US-0235834. 2000US-0235836.

25 - SEP - 2000; 25 - SEP - 2000; 26 - SEP - 2000; 27 - SEP - 2000; 27 - SEP - 2000; 29 - SEP - 2000; 29 - SEP - 2000; 29 - SEP - 2000; 29 - SEP - 2000; 29 - SEP - 2000;

2000US-0229287 2000US-0229343 2000US-0229344 2000US-0229345 2000US-0229509 2000US-0229509 2000US-0230438

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20000S-0226279 2000US-0226868 2000US-0227182 20000S-0227009 20000S-0228924

2000US-0225759 2000US-0226681 200005-0231242 200005-0231243 200005-0231413 200005-0231413 200005-0232080 200005-0232080 200005-0232081 200005-0232081

08-SEP-2000; 08-SEP-2000;

2000US-0232398 2000US-0232399 2000US-0232400 2000US-0232401 2000US-0233063 2000US-0233064 2000US-0233065 2000US-0234223 2000US-0234274 2000US-0234997

> -SEP-2000; 4-SEP-2000; 14-SEP-2000; 21-SEP-2000;

08-SEP-2000; 08-SEP-2000; 08-SEP-2000; 08-SEP-2000; 12-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000;

Mon Jan 27 14:05:48 2003

2000US-0246613. 0000US-0249207 2000US-0249209 2000US-0249210, 000US-0249211. 2000US-0249212 1000US-0249213. :0000US-0249214 2000US-0249215. 2000US-0249216 20000US-0249217 000US-0249218. :000US-0249244. :000US-0249245. :000US-0249264. 000US-0249265. 0000US-0249297 .000US-0249299. :000US-0249300. 0000US-0250160 20000S-0250391 2000US-0251030 2000US-0251988 0000S-0256719 2000US-0251479. 2000US-0251856. 2000US-0251868. 2000US-0251869 2000US-0251989. 2000US-0251990. 2001US-0259678

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9203 ATTGCTATTTTTATTGTTATTTTAACATGAATCTAAAGTTTATGGTTCCAGGGACTTTT 9262
                                                                                       9263 TATTTGACCCAACAACAGTATCCCAGGATATGGAGGCAAGGGGAACAAGAGCATGAG 9322
                                           780 TTTGGGGGCTACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGAGTACGAG 839
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                                                                                                                                840 TITITICGGGGAAATAIGGIGA 862
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2000US-0216647.
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2000US-0224518.
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24-FEB-2000;
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WPI; 2001-483426/52.

metastasis

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Best Local Similarity 52.4 Matches 75; Conservative

Query Match

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Rosen CA, Barash SC, Ruben SM;
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AAK5191 to AAK61702 encode the human immune/haamatopoietic antigen (1) aminote descences by twen in the AAM8170 to AAM91321. (Thi have Cybostatic activity, and can be used in game therepy and vecture production. (1) proteins and polymorbacked selected in the prevention distances and proteins and polymorbacked may be used to treat disorders secondared vith decreased expression by rectifying marations or other secondaried vith decreased the proteins of the proteins of the proteins of the proteins of the proteins of the proteins of the polymorbacked with decreased the proteins of the proteins of the polymorbacked with decreased the proteins of the polymorbacked with decreased the protein of (1). The proteins of the protein of (1), and the proteins of the protein of (1), and the protein of (1), and the protein of the nucleic axis into a hast cell and culturing the cell to express the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of the protein of th
Nucleic acids encoding human immune/hematopoietic antigen polypeptides, useful for preventing, diagnosing and/or treating cancers and metastasis.
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05-JAN-2001; 2001US-0259678

Ruben SM; (HUMA-) HUMAN GENOME SCI INC. Rosen CA, Barash SC, WPI; 2001-483426/52.

metastasis -

AMA3931 NO ARRAY A GRUDOR THE BINDING MIMERUPLE ALL SHARE SHARE A MARA9321 NO ARRAY A GRUDOR AND A MAS9321 NO ARRAY AND A MAS9321 (3) have cytostatic activity, and coin the used in gene therapy and vocince production (1) proteins and polymoleocities may be used in the prevention, diagnosis and creament of diseases associated with happropriate (1) expression. For example, they may be used to treat disorders associated with decreased that after the artifying mutations or detelious in a patient's genome that after the artifying mutations or detelious in a patient's genome that after the artifying mutations or detelious in a patient's genome that after the artifying mutations or detelious in proteins or to supplement the patients on production (1). Additionally, (1) by purplement the patients on production (1), additionally, (1) to proteins and polymoleocides may be used to protein the call to express the transported and cancer mensarses of hemomopoleotic derived consist more and cancer mensarses of hemomopoleotic derived colls. ARK87731 conveyed and cancer mensarses of hemomopoleotic derived ceils. ARK87731 enumeration contractions are mensarses of hemomopoleotic derived ceils. ARK87731 contractions of the prosent funam mimural patients. Nucleic acids encoding human immune/hematopoietic antigen polypeptides, useful for preventing, diagnosing and/or treating cancers and AAK54951 to AAK64702 encode the human immune/haematopoletic antigen (I) Disclosure; SEQ ID NO 34892; 3071pp + Sequence Listing; English.

represent sequences used in the exemplification of the present invention. Sequence 11366 BP; 3163 A; 2318 C; 2317 G; 3568 T; 0 other;

9206 ATTGCTATTTTTATTTTTTAACATGAATCTAAAGITTATGGTTCCAGGGACTTTT 9265 720 AGTACTACTATTAATCCTTATTTCAACGAGGCAACAAATCATACGGGACCAATGGAGGAA 779 68; Indels 0; Gaps Query Match 3.6%; Score 34.2; DB 22; Length 11366; Best Local Similarity 52.4%; PredS No. 84, Abaches 75; Conservative 0; Mismetches 68; Indels 0; Mismetches 75;

9326 TCTTTTCCAAGAAACTGGTGA 9348

earch completed: January 25, 2003, 22:59:40 ob time : 1723 secs

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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.

M nucleic - nucleic search, using sw model

(without alignments) . 4991.429 Million cell updates/sec January 25, 2003, 21:06:06; Search time 58 Seconds : uo un

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1 tggcgacttctctcttct......atttgtccttgaagctttaa 944 erfect score: equence:

IDENTITY_NUC Gapop 10.0 , Gapext 1.0, coring table:

441362 seqs, 153338381 residues earched:

882724 otal number of hits satisfying chosen parameters:

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Listing first 45 summaries

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/ggn2_6/ptodata/1/ina/FGTUS_COMB.seq:* Issued_Patents_NA:* tabase :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

CHICAGO

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	Score	45.8	36.8	34.2	C	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.8	32.6	32.2	32	35	32	32	32	31.6
	ssult No.	0	7	m	*	S	و	7	ස	0,	10	11	12	13	14	15	16	17	18	19	20	2 21	22	23	24	25	56	27

Sequence 16, Appli Sequence 1, Appli Sequence 9, Appli	Sequence 22, Appl Sequence 22, Appl Sequence 22, Appl Sequence 22, Appl		Sequence 12, Appl. Sequence 12, Appl. Sequence 7, Appli Sequence 7, Appli Sequence 70, Appli
3, 3, 5, 5		1	
US-09-128-155-16 US-08-872-094-1 US-08-872-094-9 US-08-888-0778-35	US-08-480-604A-22 US-08-405-496A-22 US-08-915-136-22 US-08-480-604A-25	US-08-405-496A-25 US-08-915-136-25 US-08-931-999-4, US-07-954-840A-9 US-07-954-840A-1	US-08-433-848-12 US-09-169-027-12 US-09-268-927-12 US-09-657-474-7 US-09-221-298-70
52331 3 2991 3 3885 3	1330 1330 1402 1402	1402 2 1402 4 6755 3 1080 1	1811 4 1811 4 2604 4 2504 4 222 4
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ALIGNMENTS

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SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                         APPLICANT: DORNER, F.
APPLICANT: SCHELELINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30472/114 IMMU
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1800 Diagonal Road, Suite 500
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                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/232,463
                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                   ; Sequence 14, Application US/08232463
; Patent No. 5670367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29,768
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                    COUNTRY: 02.0
ZIP: 22313-0299
COMPUTER READABLE FORM: TIME WYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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STRANDEDNESS: single
                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & L
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
FILING DATE: 26-AUC
                                                                                                                                                    TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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US-08-232-463-14
                                                                                                                                                                                                                                                    Alexandria
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                                                                          GENERAL INFORMATION:
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                 US-08-232-463-14/c
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TELEX: 8
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RESULT 1
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Length 7218;

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380 TGGAGTCGGGTCGGGTCAGGTTATGATCGGGGTTATTTGTCGCGGTTTTGTTGA 439
                                                                                                                                  440 GACCTCCTCCACTACTCATGAGCTCTTCTAATCTCAAATCCTCAAATGTTTAACGCTTC 499
                                                                                                                                                                                                                                                                          500 TICCAATAATCGCIGIGACACTTGCTTCAAGAAACGITTGGATGGTGGAGAATAA 559
                                                                                                                                                                                                                                                                                                                                                                                                             560 TGTAGTTCGATCCAACGGTGGTGGATTTTCGAAATACACAATGATTCCTCCTCCGATGAA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620 CGGCTACGATCAGTATCTTCTTCAATCAGATCATCATCAGAGGAGCCAAGGTTTCCTTTA 679
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TELEPHONP.
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1100 New York Avenue, N.W.
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APPLICANT: ARMOUR, John
TITLE OF INVENTION: SIMPLE TANDEW REPEATS
NUMBER OF SEQUENCES: 125
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FILING DATE: 01-NOV-1994
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Patent No. 5843647
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OPERATING SYSTEM: PC-DOS/MS-DOS
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TELEFAX: (202) 822-0944
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: 22:
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TYPE: nucleic acid
STRANDEDNESS: single
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ADDRESSEE: CUSHMAN D.
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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20005-3918
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                                         Gaps
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                                         68; Indels
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MEDIUM TYPE. Tioppy disk.
MENDINE THE Compatible
OFFRATING STETRI. PC-DOS/MSDOS
OFFRATING STETRI. PC-DOS/MSDOS
OFFRATING STETRI. DC-DOS/MSDOS
OFFRATING STETRI. DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS DC-DOS/MSDOS D
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     ilarity 8.5%; Pred. No. 9.3e-05;
Conservative 116; Mismatches 6
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**- 30472/114 IMMU
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APPLICATION NUMBER: US/07/935,313
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 14, Application US/08232463
Patent No. 5670367
GENERAL INFORMATION:
APPLICANT: DORNER, F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1056 CCCTCGACCTGCAGCT 1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     276 GCATCGATCTCTAACAACGCT 296
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1800 Diagonal Road,
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INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 7218 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-232-463-14
     Best Local Similarity
Matches 17; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IMMEDIATE SOURCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-232-463-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX:
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Query Match 3.9%; Score 36.8; DB 1; Length 7218;

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1028 AAGTTTTACCGAAATCTGCTGCAAAAAGCAGGACTTAAAAGCGGGGGGATATTATCACGG 1087
                                                                                                                                         790 ACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAAGGAGTACGAGTTTTTTCCGG 849
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.5%; Score 32.8; DB 1; Length 1611;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: KINDAM, Howard C.
APPLICANT: Samuel, James E.
APPLICANT: Samuel, James E.
TITLE OF INVENTION: ADHESIN-OLIGOSACCHARIDE CONJUGATE
TITLE OF INVENTION: ADHESIN-OLIGOSACCHARIDE CONJUGATE
MINDRES OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENLIN RELEASE #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                           1088 CGATGAACGGTCAAAAATCTCAAGTTTCGCTGAAA 1123
                                                                                                                                                                                                                                                                   850 GGAAATATGGTGAAAGAGTTTCAGTGGTGGCTACAA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. 0.89;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROLICATION NUMBER: US 07/810,966 FILING DATE: 20-05-1991 PRION APPLICATION NUMBER: 07/811,698 FILING DATE: 21-050-1990 FILING DATE: 21-050-1990 FILING DATE: 31-050-1990 F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ...ak: US/08/480,993
07-JUN-1995
0N: 435
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FILING DATE: 22-UN-1992
PRIOR APPLICATION DATA: US 07/810,966
APPLICATION UNBER: US 07/810,966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7969-050
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CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-480-993-1; Sequence 1, Application US/08480993; Patent No. 5721115
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TELEFAX: (212) 869-8864/9741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pennie & Edmonds
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INFORMATION FOR SEQ ID NO: 1:
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MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: New York
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       U.S.A.
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                                                                                                                                    99 GAGATCCGGACAGAGACACTGAAGAGTCGTCGGAAACCAGGATCGAAGACAGGTCAG 158
                                                                                                                                                                                                      159 CAAAAACAGAAGAAACCAACGTTGAGAGGAATGGGTGTAGCAAAGCTCGAGGGTCAGAGA 218
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Owery Match 3.6%; Score 34.2; DB 2; Length 494; Bet Local Similarity 49.0%; Pred. No. 0.14; Matches 72; Conservative 0; Mismatches 75; Indels Matches 75; Local State Conservative 0; Mismatches 75; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GOGNERAL INC. 567934,
GERERAL INFORMATION:
GERERAL INFORMATION:
GERERAL INFORMATION:
APPLICANT: KITVAIN, HOWARD C.
APPLICANT: KITVAIN, JAMES E.
APPLICANT: KITVAIN, ADMES E.
APPLICANT: KITVAIN, ADMES E.
APPLICANT: KITVAIN, ADMES E.
APPLICANT: KITVAIN, ADMESTIVON: VACCINE FOR HARMOPHILUS INFINENZAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATURG SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRICE APPLICATION GNAT:
APPLICATION MANES: US 07/810,366
FILING APPLICATION MUNICES: 20 DEC-1931
PRICE APPLICATION MATA: 907/631,698
FILING NATE: 21-DEC-1930
FILING DATE: 31-DEC-1930
MANES: BAI'dAI, GAETALIAN F.
                                                                                                                                                                                                                                                                                                                                                                                                  219 ATCGAAGAAGAAAGAAGCAACTCGCC 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    276 AAGAAAATANNNNNNNNNNAACTCC 302
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APPLICATION NUMBER: US 07/903,079
FILING DATE: 22-JUN-1992
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FILING DATE: 07-JUN-1995
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Patent No. 5679547
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TELEPHONE: (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pennie & Edmonds
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MEDIUM TYPE: Floppy
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: New York
RY: U.S.A.
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COUNTRY:

STREET: STATE:

ESULT 4 IS-08-485-569-1

ELEFAX:

Matches

730 TTAATCCTTATTTCAACGAGGCAACAAATCATACGGGACCAATGGAGGAATTTGGGAGCT 789

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1088 CGATGAACGGTCAAAAATCTCAAGTTTCGCTGAAA 1123
  850 GGAAATATGGTGAAAGAGTTTCAGTGGTGGCTACAA 885
                                                                                                                                                                                                                                                                                                                                                                                                                          Canada
                                                                                                                                                                                                                                                                                                                                                      STREET: Sur-
                                                                                                                                                                                                                                                                                                                                                                                                         STATE: Ontario
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                        M5G 1R7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER:
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                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                            RESULT 7
US-08-278-091-1
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968 TCAATGCTGATTTAGCCAAAGCCTTTAATGTAAGGGGGCAACAAGGTGCATTTGTAAGTG 1027
                                                        790 ACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGAGTACGAGTTTTTTCCGG 849
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                                                                                                                                                                                                                                                                       GENERAL INFORMATION:

APPLICANT: SEMELL JAMES E
APPLICANT: SEMELL JAMES E
TITLE OF INVENTION ADDISSIVE ADDISSIVE CONJUGATE
TITLE OF INVENTION: APPLICANT FOR HARDORILLIS CONJUGATE
TITLE OF INVENTION: VACCINE FOR HARDORILLIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                 1088 CGATGAACGGTCAAAAATCTCAAGTTTCGCTGAAA 1123
                                                                                                          850 GGAAATATGGTGAAAGAGTTTCAGTGGTGGCTACAA 885
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50.6%; Pred, No. 0.89;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/07/903,079B
FILING DATE: 22-JUN-1992
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/631,698
FILING DATE: 21-DEC-1990
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/810,966
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7969-004
                                                                                                                                                                                                                                                                                                                                                                                                                       E: Pennie & Edmonds
1155 Avenue of Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                   Sequence 1, Application US/07903079B Patent No. 5843463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E: Floppy disk
IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Misrock, S. Leslie
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (212) 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : 1611 base pairs
nucleic acid
EDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unknown
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Best Local Similarity
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MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New York
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
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                                                                                                                         APPLICANT: CAUGHE, RAYMOND P. APPLICANT: KIERD, Michel H. THITTE OF INVENTION: A mallog of Heemophilus Hin47 Protein with TITLE OF INVENTION: Reduced Protease Activity CORRESPONDENCES: 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 32.8; DB 1; Length 2894;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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                                                                                                                                                                                                                                                                              Suite 701, 330 University Avenue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-JUL-1994
N: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 1038-371
                                                                                                                                                                                                                                                                                                                                                                                                                           IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
Sequence 1, Application US/08278091
Patent No. 5506139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24,973
                                       GENERAL INFORMATION:
APPLICANT: LOCSWORE, Sheena M
APPLICANT: YANG, Yan-Ping
APPLICANT: CHONG, Pele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                             Sim & McBurney
                                                                                                                                                                                                                                                                                                                                                                                                           Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Stewart, Michael I
REGISTRATION NUMBER: 24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2894 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
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Matches 79; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
FILING DATE: 21-JUI
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; Sequence 1, Application US/08483859 ; Patent No. 5656436

US-08-483-859-1

968 TCAATGCTGATTTAGCCAAAGCCTTTAATGTAAGCGCGCAACAAGAGGTGCATTTGTAAGTG 1027

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790 ACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGAGTACGAGTTTTTTCCGG 849

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1715 AACTITTACCGAAATCTGCTGCTGAAAAGCAGGACTTAAAGCGGGGGATATTATCACGG 1774
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Defent No. 1565302

GENERAL INFORMATION:
APPLICANT: LOCSHONE, Sheena M.
APPLICANT: WONG, Yan-Ping
APPLICANT: CHONG, Pele
APPLICANT: COMEN, Raymond P.
APPLICANT: COMEN, Raymond P.
TITLE OF INVENTION: Reduced Procease Activity
TITLE OF INVENTION: Reduced Procease Activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.5%; Score 32.8; DB 1; Length 2894; 50.6%; Pred. No. 1.3;
                                                                                                                                                                                                                                                         SOFWARE, PERCENTIN Reliaise #1.0, version #1.25
CURRENT APPLICATION DATA, 100/08/472,173
APPLICATION NOMEST: 05/08/472,173
CLASSIPCATION: 435
APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION APPLICATION NOMEST: 03/08/296,149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Stewart, Michael I.
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038-493 MIS:vg
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STREET: Suite 701, 330 University Avenue
                         E: Sim & McBurney
Suite 701, 330 University Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 08/278,091
                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 26-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/,
FILING DATE: 21-JUL-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (416) 595-1155
TELEPAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 2894 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 50.6
Matches 79; Conservative
                                                                                                                                                                    COMPUTER READABLE FORM:
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CORRESPONDENCE ADDRESS:
   CORRESPONDENCE ADDRESS
                                                                                    STATE: Ontario
COUNTRY: Canada
ZIP: MSG 1R7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
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CITY: Toronto
STATE: Ontario
                                                                         Toronto
                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 10
US-08-487-167-1
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                                                   TITLE OF INVENTION: Analog of Heemophilus Hin47 Protein with TITLE OF INVENTION: Reduced Protease Activity NUMBER OF SEQUENCES: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Analog of Haemophilus Hin47 Protein with
Reduced Protease Activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.5%; Score 32.8; DB 1; Length 2894; 0.6%; Pred. No. 1.3; ve 0; Mismatches 77; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                 SYSTEM: PC-DOS/MS-DOS
PatentIn Release #1.0, Version #1.25
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                                                                                                                                                                                       Suite 701, 330 University Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1038-495 MIS:VQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 08/296,149
FILING DATE: 26-AUG-1994
PRIOR APLICATION DATA:
APPLICATION NUMBER: US 08/278,091
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/483,859
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/08472173
Patent No. 5665353
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                  ZIP: MSG IR7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: LOOSMORE, Sheena M
APPLICANT: YANG, Yan-Ping
APPLICANT: CHONG, Pele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Stewart, Michael I. REGISTRATION NUMBER: 24,973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 103
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: OOMEN, Raymond P.
APPLICANT: KLEIN, Michel H.
TITLE OF INVENTION: Analog o
TITLE OF INVENTION: Reduced
CHONG, Pele
OOMEN, Raymond P.
KLEIN, Michel H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.5%;
Best Local Similarity 50.6%;
Matches 79; Conservative
                                                                                                                                                                        Sim & McBurney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 21-JUL-1994
ATTORNEY/AGENT INFORMATION:
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INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 2894 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                           CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
                                                                                                                                                                                                                                          Ontario
: Canada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 07
CLASSIFICATION:
                                                                                                                                                                               STREET: Sur...
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                                                                                                                                                                        ADDRESSEE:
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5-08-483-859-1

S-08-472-173-1

ESULT 9

APPLICANT: APPLICANT:

SOFTWARE:

COUNTRY:

STATE:

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1655 TCAATGCTGATTTAGCCAAAGCCTTTAATGTAAGCGCGCAACAAGGCGCATTTGTAAGTG 1714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1715 AAGTITTACCGAAATCIGCTGCTGAAAAAGCAGAGATTAAAGGGGGGGGATATATCACG 1774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 730 TTAATCCTTATTTCAACGAGGCAACAAATCATACGGGACCAATGGAGGAATTTGGGAGCT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  790 ACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGAGTACGAGTTTTTTCCGG 849
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 2894;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of Haemophilus Hin47 Protein with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 32.8; DB 2;
Pred. No. 1.3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Analog of Haemophilus Hin
Reduced Protease Activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   850 GGAAATATGGTGAAAGAGTTTCAGTGGTGGCTACAA 885
                                                                                                                                                                                                            NAME: Stewart, Michael I
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 1038-494 MIS:vg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6: Sim & McBurney
Suite 701, 330 University Avenue
   US/08/482,816
                                                                                    US 08/296, 149
                                                                                                                                                  US 08/278,091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/296,149
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; Sequence 1, Application US/08296149
; Patent No. 5939297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: LOOSMORE, Sheena M
APPLICANT: YANG, Yan-Ping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IBM PC compatible
                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APFLICANT: CHONG, PELC
APPLICANT: OOMEN, RAYMOND P.
"DOTTCANT: KLEIN, MICHEL H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 50.68;
Matches 79; Conservative
                                                                                                                                                                                                                                                                                                    (416) 595-1155
                   FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
                                                                                                       FILING DATE: 26-AUG-1994
                                                                                                                                                                     FILING DATE: 21-JUL-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                    TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 1
                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 2894 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 514
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                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                           PRIOR APPLICATION DATA:
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ADDRESSEE: Sim & MCB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: KLEIN, MIC
TITLE OF INVENTION: A
TITLE OF INVENTION: R
NUMBER OF SEQUENCES:
APPLICATION NUMBER:
                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                        nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
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'RY: Canada
M5G 1R7
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                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                    TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-482-816-1
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                                                                             SOFTWARE: Patentin Release #1.0, Version #1.25
APPLICATION DATA, 0908/487, 167
FILING DATE: 07-TIM-10s
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50.6%; Pred. No. 1.3;
tve 0; Mismatches 77;
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                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/296,149
                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 08/278,091
FILING DATE: 21-JUL-1994
ATTORNEY/AGENT INFORMATION:
                                      MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM PC POS MS POS
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Patent No. 5935573
                                                                                                                                                                                                                                                                                                                                                        NAME: Stewart, Michael I.
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 10.
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APPLICANT: YANG, Yan-Ping
APPLICANT: CHONG, Pele
                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
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APPLICANT: OOMEN, RAYMOND P.
APPLICANT: KLEIN, Michel H.
                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (416) S95-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                               07-JUN-1995
N: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 50.6%;
Matches 79; Conservative
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                                                                                                                                                                                                                                                   FILING DATE: 26-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 2894 base pairs
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COUNTRY: Canada
ZIP: MSG 1R7
COMPUTER READABLE FORM:
MEDIUM IYPE: Floppy di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
                      COMPUTER READABLE FORM:
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ADDRESSEE: Sim & MCB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
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                                                                                                                                                                                        CLASSIFICATION:
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US-08-482-816-1
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1655 TCAATGCTGATTTAGCCAAAGCCTTTAATGTAAGCGCGCAACAAGGCGCATTTGTAAGTG 1714
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                                                                                                                                                                                                                                                                                                                                                                                           1715 AAGTTTTACCGAAATCTGCTGCTGAAAAGCAGGACTTAAAGCGGGCGATATTATCACGG 1774
                                                                                                                                                                                                                                                                730 TTAATCCTTATTTCAACGAGGCAACAATCATACGGGACCAATGGAGGAATTTGGGAGCT 789
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                                                                                                                                                                            Length 2894;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SYSTEM: PC-DOS/MS-DOS
PatentIn Release #1.0, Version #1.30
                                                                                                                                                                            DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1775 CGATGAACGGTCAAAAATCTCAAGTTTCGCTGAAA 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                      850 GGAAATATGGTGAAAGAGTTTCAGTGGTGGCTACAA 885
                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6th Floor, 330 University Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
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50.6%; Pred. No. 1.3
                                                                                                                                                                         3.5%; Score 32.8;
50.6%; Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/08615271
Patent No. 5981503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: LOOSMORE, Sheena M. APPLICANT: YANG, Yan-Ping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24,973
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N: 514
   INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: M5G 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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NAME: Stewart, Michael I
RECISTRATION NUMBER: 24,5
REFERENCE/DOCKET NUMBER:
                                       : 2894 base pairs
nucleic acid
EDNESS: single
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INFORMATION FOR SEQ ID NO: 1
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                                                                                                                                                                                                                        79; Conservative
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                                                                                                                 linear
                                                                                                                                                                                                Best Local Similarity
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STATE: Ontario
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CLASSIFICATION:
                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
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                                                                                                             TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                              LENGTH:
                                                                                                                                 US-08-801-499-1
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APPLICANT TANG, Far-fing
APPLICANT (SMOW), Pele
APPLICANT: COMEN, Fall
APPLICANT: KLEIN, MICHEL H.
TITLE OF INVENTION: Analog of Heemophilus Hin47 Protein with Reduced Protease Act
                                                                                                                                                                                                                                                                                                                                                                                           1655 TCAATGCTGATTTAGCCAAAGCCTTTAATGTAAGGGGGAACAAGAGGGGCATTTGTAAGTG 1714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1715 AAGTTTTACCGAAATCTGCTGCTGAAAAGCAGGACTTAAAGCGGGGGGATATTATCACGG 1774
                                                                                                                                                                                                                                                                                                                                               730 TTAATCCTTAFTTCAACGAGGCAACAAATCATACGGGACCAATGGAGGAATTTGGGAGCT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                      790 ACATGGAAGGAAACCCTAGAAATGGATCAGGAGGTGTGAAGGAGTACGAGTTTTTTCCGG 849
                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                DB 2; Length 2894;
                                                                                                                                                                                                                                                                                                    77; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1775 CGATGAACGGTCAAAAATCTCAAGTTTCGCTGAAA 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         850 GGAAATATGGTGAAAGAGTTTCAGTGGTGGCTACAA 885
                                                                                                                                                                                                                                                                                    Pred. No. 1.3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6th Floor, 330 University Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1038-671 MIS: 1b
                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                3.5%; Score 32.8;
50.6%; Pred. No. 1.3
REFERENCE/DOCKET NUMBER: 1038-390
TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US 08/278,091
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 08/296,149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08/801.499
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/08801499
Patent No. 5962430
GENERAL INFORMATION:
                                       TELEPHORE. (416, 595-5155)
INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHRANCHESTICS: LENGTH: 2894 base pairs TYPE: nucleic ecid STRANDDONESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sim & McBurney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILLING DATE: 26-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILLING DATE: 21-UUL-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: M5G 1R7
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stewart, Michael I
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                                                                                                                                                                                                                                                                                    Best Local Similarity 50.6
Matches 79; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: U
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                             TOPOLOGY: linear
S-08-296-149-1
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M5G 1R7
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STATE: Ontario
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1655 TCAATGCTGATTTAGCCAAAGCCTTTAATGTAAGCGCGCAACAAGAGGGGGGTTTGTAAGTG 1714
                                                                                                                             1715 AAGTITTACCGAAATCTGCTGCTGAAAAGGAGCTTAAAGGGGGGGATATTATCAGGG 1774
730 TTAATCCTTATTTCAACGAGGCAACAAATCATACGGGACCAATGGAGGAATTTGGGAGCT 789
                                                                                              790 ACAIGGAAGGAAACCCIAGAAATGGAICAGGAGGTGTGAAGGAGTACGAGTTTTTTCCGG 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Analog of Haemophilus Hin47 Protein with TITLE OF INVENTION: Reduced Protease Activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                              1775 CGATGAACGGTCAAAAATCTCAAGTTTCGCTGAAA 1810
                                                                                                                                                                                                 850 GGAAATATGGTGAAAGAGTTTCAGTGGTGGCTACAA 885
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STREET: 6th Floor, 330 University Avenue
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PRIOR APPLICATION HUMBER: US 08/256,149
PRIOR APPLICATION DAIN: 36-AUG-1594
PRIOR APPLICATION DAIN: 18 08/278,091
FILING DAIR: 21 JUL-1594
NATCHER/ARCH INCOMMERT 1904
NAME: 516-ARCH AUCH-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/487,167
FILING DATE: 07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/074,660
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/09074660
Patent No. 6020183
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICAMT: LOOSMORE, Sheena M. APPLICAMT: YANG, Yan-Ping APPLICAMT: CHONG, Pele APPLICAMT: OWNEN, Raymond P. APPLICAMT: KLEIN, Michel H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Stewart, Michael I.
REGISTRATION NUMBER: 24,973
REFERENCE/DOCKET NUMBER: 103
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (416) 595-1155
TELEFAX: (416) 595-1163
INFORMATION FOR SEG ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 2894 base pairs
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STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: Canada
ZIP: M5G 1R7
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STATE: Ontario
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
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Ouery Match 1.5%; Score 32.8; DB 3; Length 2894; Best Local Similarity 50.6%; Fred No. 1.3; To Matches 79; Conservative 0; Mismatches 77; Indels 0; Matches 79; Conservative 0.

GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.

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396772 segs, 224632407 residues IDENTITY_NUC Gapop 10.0 , Gapext 1.0 sarched:

coring table:

otal number of hits satisfying chosen parameters:

Ost-processing: Minimum Match 0% Maximum Match 100% inimum DB seq length: 0

Published_Applications_NA:* Listing first 45 summaries tabase:

/cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seg:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARIES

						COLUMNITOR	
S	ssult		Query				
_ :	No.	Score	Match	Watch Length DB	BB	QI.	Description
•	Н	35.8	3.8	465237	10	US-09-933-267A-1	Sequence 1, Appli
	2	34,6	3.7	2269	6	US-09-989-920-113	Sequence 113, App
	m	34.2	3.6	389	σ	US-09-796-692-2664	Sequence 2664, Ap
	4	34	3.6	470	10	US-09-864-761-701	Sequence 701, App
n	'n	33.6	3.6	307	10	US-09-867-701-7516	Sequence 7516, Ap
	9	33	3.5	265	10	US-09-764-864-753	Sequence 753, App
	7	33	3.5	331	10	US-09-864-761-29232	Sequence 29232. A
	60	33	3.5	365	10	US-09-764-864-338	Sequence 338, App
	on	33	3.5	511	10	US-09-864-761-12665	Sequence 12665. A
•	10	32.8	3.5	1381	ď	US-09-938-842A-4232	Sequence 4232. Ap
•	7	32.4	3.4	286	12	US-09-867-701-8693	Sequence 8693, Ap
	12	32.4	3.4	387	10	US-09-864-761-16334	Sequence 16334, A
	13	32.4	3.4	470	10	US-09-864-761-1484	Sequence 1484. Ap
•	14	32.4	3.4	470	10	US-09-864-761-15622	Sequence 15622, A
**	15	32.2	3.4	1038	σ	US-09-864-921-11	Sequence 11, Appl
^	16	32.2	ж •	1101	10	US-09-815-242-4645	Sequence 4645, Ap
^	17	32.2	3.4	1107	σ	US-09-864-921-84	Sequence 84, Appl
	18	32.2	æ.	1155	10	US-09-815-242-8511	Sequence 8511, Ap
,,	13	32.2	3.4	3111	10	US-09-728-721-56	Sequence 56, Appl

	ALIGNMENTS					
Sequence 1, Appli	US-09-910-186A-1	o,	1332	E, 2	30.4	4 5
Sequence 5, Appli	US-09-910-186A-5	σ.	1326	3.5	30.4	44
Sequence 3, Appli	US-09-910-186A-3	9	1323	3.5	30.4	£.
Seguence 5214, Ap	US-09-867-701-5214	10	684	3.5	30.4	42
Sequence 11, Appl	US-09-350-756-11	10	621	3.5	30.4	41
Sequence 3, Appli	US-09-804-471A-3	10	174493	3.5	30.6	40
Sequence 314, App	US-09-967-768A-314	10	174424	3.3	30.8	39
Sequence 302, App	US-09-764-855-302	10	2851	3.3	30.8	38
Sequence 300, Apr	US-09-764-855-300	10	2851	3.3	30.8	37
Sequence 301, App	US-09-764-855-301	10	2815	3.3	30.8	36
Sequence 16, Appl	US-10-095-407-16	6	152331	3,3	31	35
Sequence 1390, A	US-09-764-847-1390	10	11872	3.3	31	34
Sequence 370, Apr	US-10-044-090-370	12	7805	3.3	31	33
Sequence 301, App	US-09-822-849A-301	10	2968	3.3	31	32
Sequence 3, Appl	US-09-949-654-3	10	368004	3.3	31.2	31
Sequence 8787, Ap	US-09-796-692-8787	5	356	3.3	31.2	30
Sequence 17, App	US-09-070-927A-17	10	32768	3.3	31.4	53
Sequence 3446, A	US-09-764-877-3446	10	13605	3.3	31.4	28
Sequence 4161, Ap	US-09-938-842A-4161	5	2000	3.3	31.4	27
Sequence 5388, A	US-09-294-093B-5388	10	300	3.3	31.4	56
Sequence 4115, A	US-09-294-093B-4115	10	270	3.3	31.4	25
Sequence 3, Appl	US-09-801-876B-3	10	148567	3.3	31.6	54
Sequence 1, Appli	US-08-687-691B-1	ထ	1798	3.3	31.6	23
Sequence 100, Apr	US-09-070-927A-100	10	32768	3.4	32	22
Sequence 2854, Ap	US-09-938-842A-2854	6	2000	3.4	32	21
Sequence 54, Appl	US-09-728-721-54	10	4244	3.4	32.2	20

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157 AGCAAAAACAGAAGCAACCAACGTTGAGAGTGAGGTGTAGCAAAGCTCGAGCGTCAGA 216
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches 87; Indels
                                                                                                  APPLICANT KAINSh, Factils et al.
TITLE OF INVENTION: Estrogen receptor alpha variants and
TITLE OF INVENTION: mathods of detection thereof
FILE MEPRENCE: CLOODCSBCII,
CURRENT PAREITAND NUMBER: 187/59/933.267A
CURRENT FILING DATE: 2001-06-21
PRIOR PELICATION WHERE: 60/716626
PRIOR FILING DATE: 1999-10-20
                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2000-02-22
PRIOR FILING DATE: 2000-02-22
PRIOR FELCATION MINRER: 09/562414
PRIOR FILING DATE: 2000-10-20
PRIOR FELCATION MINRER: 09/766184
PRIOR FELCATION MINRER: 09/766184
PRIOR FELCATION MINRER: 09/864076
PRIOR FELCATION MINRER: 2001-01-24
PRIOR PELCATION WINRER: 2001-03-13
PRIOR FELCATION WINRER: 2001-04-05
MINRER: OF SED ID NOS: 2
SOFTMARE: PARESDO TO MILIONA VORSION 4.0
                        Sequence 1, Application US/09933267A Patent No. US20020123095A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 52.98
Matches 99; Conservative
                                                                                  GENERAL INFORMATION:
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US-09-933-267A-1/C
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GENERAL, INCOMATION:
APPLICANT: REAK, DAVID R.
APPLICANT: RANK, DAVID R.
APPLICANT: RANK, DAVID R.
APPLICANT: RANGE, DAVID R.
APPLICANT: CHEN, MENSHER, DAVID R.
TITLE OF INCOMPTION: GENERAL SERVICE EXON NUCLEIC ACID PROBES USEFUL I
TITLE OF INCOMPTION: GENER EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: ACOULT ON NUMBER: USFORD SERVICE ACID PROBES USEFUL I
CORREST PLINED THE SERVICES ACID-105-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              225 TATTIGACCCAACAACACAGIATCCCAGGATATGGAGGCAAGGGGAACAAAGAGCIAGAGG 284
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Best Local Similarity 52.4%; Pred. No. 0.36;
Best Local Similarity 52.4%; Nismatches 68; Matches 75; Conservative 0; Mismatches 68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2000-08-04
BAIGA APPLICATION MUSHER: 66/223,378
PRIOR FILING DATE: 2000-08-07
MUSHER COF EQ. ID NOS: 9597
SOCTHARRE: FRALESE for Windows Version 3.0
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PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: PCT/US01/00667
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PRIOR APPLICATION NUMBER: 0S 60/207,456
PRIOR FILING DATE: 2000-65-26
PRIOR APPLICATION NUMBER: US 99/632,366
PRIOR PILING DATE: 2000-08-03
PRIOR PLING DATE: 2000-08-03
                                                                                                                                                                                                                     PRIOR FILING DATE: 2000-05-01
PRIOR APPLICATION NUMBER: 60/202,084
PRIOR FILING DATE: 2000-05-04
                                        APPLICATION NUMBER: 60/200,303
                                                                                                             APPLICATION NUMBER: 60/200,779
                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/200,999
                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/206,201
                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2000-05-22
PRIOR APPLICATION NUMBER: 60/218,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/222,903
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PRIOR APPLICATION NUMBER: 60/223,416
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Patent No. US20020048763A1
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                                                                                                                                                PRIOR FILING DATE: 2000-04-28
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2000-04-27
                                                                          2000-04-28
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ORGANISM: Homo sapiens
FILING DATE:
                                                                          FILING DATE:
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APPLICANT: Chen, Selfyu
APPLICANT: Chen, Selfyu
APPLICANT: Liu, Chonghua
APPLICANT: Liu, Chonghua
TITLE OF HINWRITONT: Compositions and Methods Relating to lung Specific Genes and Prop
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TITLE OF INVENTION: HEMPONOCOLOGICAL MALIGNANCIES
FILE REPERENCE: 2007,001200
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                                                                                217 GAATCGAAGAAGAAAGAAGCAACTCGCCGCCGCCACAGTCGGAGACACGTCAGTAG 276
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        107 GACAGAGACACTGAAGAGTCGTGGTCGGAAACCAGGATCGAAGACAGGTCAGCAAAAACA 166
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CURRENT TILKE DARK: 2001 0-01
CURRENT TILKE DARK: 2001 0-01
PRIOR APPLICATION NUMBER: 60/166/126
PRIOR FILING DARE: 2000 0-03
PRIOR APPLICATION NUMBER: 60/190,479
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Publication No. US20020198362A1
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; Patent No. US20020172957A1
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APPLICANT: Gaiger, Alexander
APPLICANT: Algate, Paul A.
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APPLICANT: Macina, Roberto
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ORGANISM: Homo sapien
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Matches 73; Conserva
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US-09-796-692-2664
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US-09-989-920-113
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GENERAL INCOMATION
APPLICANT: REAL AND ADVISOR R.
APPLICANT: REAL DAVIG R.
APPLICANT: REAL DAVIG R.
APPLICANT: CHEM, MENSHED STRUCK R.
TITLE OF INVENTION: GUNE EXPRESSION ANALYSIS BY MICROARRY
FILE REPERSENCE: ACCOUNTED STRUCK BY MICROARRY
FILE REPERSENCE: ACCOUNTED STRUCK BY MICROARRY
CORRENT FILING DAYE: 2001-05-23
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                                                                                                                                                                                                                             144 TCGAAGACAGGTCAGCAAAAACAGAAAACCAACGTTGAGAGGAATGGGTGTAGCAAAG 203
                                                                                                                                                                                                                                                3.6%; Score 33.6; DB 10; Length 307;
59.4%; Pred. No. 0.49;
tive 0; Mismatches 39; Indels 0
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CURRENT FILTMO BARE: 2000-10-17
Prior application data removed - consult PALM or file wrapper
NOTHERS PER EACH OF SECTION OF THE PRIOR OF THE PRIOR OF THE PRIOR OF THE PRIOR OF T
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                                                                                                                                                                                                                                                                                                                                     0; Mismatches
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OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: SITE
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Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 753, Application US/09764864
; Patent No. US20020132753A1
                                                                                                                                                               Best Local Similarity 59.4
Matches 57; Conservative
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                                                                              ; ORGANISM: Homo sapien
US-09-867-701-7516
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             SEQ ID NO 7516
LENGTH: 307
TYPE: DNA
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US-09-764-864-753
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CENERAL INPOMENTION SENSION OF THE THERAPY
APPLICANT: JOSES, ROBERT C.
TITLE OF INVENTION: OPPOSITIONS AND METHODS FOR THE THERAPY
FILE REPERMENT 2.10.10.14.9.14.
CURRENT APPLICANTION: OPPOSITIONS AND METHODS FOR THE THERAPY
FILE REPERMENT 2.10.10.14.9.1.
CURRENT APPLICATION NUMBER: US/09/867.701
CURRENT FILE OF NEWS: 10912.0.2.3.
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NE EXPRESSED IN AULT. LINEN, SIGNAL, — 1.3

NE EXPRESSED IN BARN SIGNAL, — 1.4

EXPRESSED IN BANE MARGON, SIGNAL, — 0.75

NE EXPRESSED IN PAREON, SIGNAL, — 0.75

NE EXPRESSED IN PAREONNA, SIGNAL, — 0.75

NE EXPRESSED IN PAREONNA, SIGNAL, — 0.75

NE EXPRESSED IN PRACTICAL SIGNAL, — 0.75

NE EXPRESSED IN PRACTICAL SIGNAL, — 0.75

NE EXPRESSED IN PRACTICAL SIGNAL, — 0.75

NE EXPRESSED IN PRACTICAL SIGNAL, — 0.75
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EXPRESSED IN BT474, SIGNAL = 0.62
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TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACLD PROBES USEFUL TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
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SEQ ID NO 388 Patentin Ver. 2.0
SEQ ID NO 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 10; Length 365;
                                                                                                                                       TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies PRIE REPREMSE. PP23. CURREN APPLICATION NUMBER: US/09/764,864
CURRENT FALING DATE: 2001-01-17
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Best Local Similarity 58.8%; Pred. No. 0.86;
Matches 57; Conservative 0; Mismatches
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PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
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PRIOR FILING DATE: 2001-01-30
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PRIOR FILING DATE: 2001-01-30
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PRIOR APPLICATION NUMBER: PCT/US01/00663
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PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR FILING DATE 2001-01-30
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Patent No. US20020048763A1
GENERAL INFORMATION:
               Sequence 338, Application US/09764864 Patent No. US20020132753A1
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Chen, Wensheng
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Penn, Sharron G. APPLICANT: Rank, David R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                              APPLICANT: Rosen et al.
                                                                                GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 GGGCCTTGACABABAACGTCTTTGCCGAAATCTAGGAAAGAAAGAAAGAAGAAGGACTGAGAAAGG
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REPRESSED IN FACETIVE, SIGNAL = 10.82
REPRESSED IN BRAIN, SIGNAL = 10.82
REPRESSED IN BRAIN MARROW, SIGNAL = 0.94
REPRESSED IN EIGHT LITTER, SIGNAL = 0.94
REPRESSED IN EIGHT LITTER, SIGNAL = 0.94
REPRESSED IN EIGHT LITTER, SIGNAL = 0.94
REPRESSED IN EIGHT LITTER, SIGNAL = 0.94
REPRESSED IN EIGHT LITTER, SIGNAL = 0.94
REPRESSED IN EIGHT SIGNAL = 1.20e-00
REPRESSED IN EIGHT SIGNAL = 1.20e-00
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ilarity 53.5%; Pred. No. 0.81;
Conservative 0; Mismatches 60; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 29232
PRIOR PRILICE NATE: 2009.09-01-06
PRIOR PRILICE MATE: 2009.09-01-06
PRIOR PRILICE MATE: 2000-09-03-1-56
PRIOR PAPELICATION WINNERS: US 60/207.456
PRIOR PAPELICATION WINNERS: US 60/20-1-66
PRIOR PAPELICATION WINNERS: US 60/20-05-1-59
PRIOR PAPELICATION WINNERS: US 60/20-05-1-59
PRIOR PAPELICATION WINNERS: US 60/20-05-1-59
PRIOR PAPELICATION WINNERS: PCT/USOL/0666
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PRIOR PREDICATION WINNERS: PCT/USOL/0666
PRIOR PELINE DATE: 2001-01-30
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Best Local Similarity
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OTHER INFORMATION:
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TYPE: DNA FEATURE:

Matches

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APPLICANT C. Chen, Worshelm BINAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEPUL PO
TITLE OF INVESTIONS HIMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEPUL PO
FILE REFERENCE: ACOMIGGA X-1
                                                                                                                                                                                                 1199 TTACACGTAACACGTTGGGAAATTTTCAAACAACACCAACATTTTGGTTTCAATCTACG 1140
1259 CTGAGTCAACGTCAACGCCAATGCCACGCATGCTTATTAGTTCTTAGACCATTCGAAACG 1200
                                                   457 ATGAGCTCTTTCAATCTCAAATCCTCAAATGTTTAACGCTTCTTCCAATAATCGCTGTG 516
                                                                                                                                                      517 ACACTTGCTTCAAGAAGAAAGGTTTGGATGGTGATCAGAATAATGTAGTTCGATCCAACG 576
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APPLICANT: HATJOCKET, SISBAL L
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: OBI DIAGNOSIS OF OVARIAN CANCER
FILE REPRENCE: 210.11.497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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CURRENT PLINCANT NUMBER: 2001-05-23
PRIOR PLINCANTE: 2001-05-23
PRIOR FLILINC DARE: 2000-02-04
PRIOR PLILINC DARE: 2000-05-26
PRIOR PLILINC DARE: 2000-05-26
PRIOR PLILINC DARE: 2000-05-26
PRIOR PLILINC DARE: 2000-05-26
PRIOR PLILINC DARE: 2000-06-03
PRIOR PLILINC DARE: 2000-06-03
PRIOR PLILINC DARE: 2000-10-04
PRIOR PLILING DARE: 2000-10-04
PRIOR PLILING DARE: 2000-10-04
PRIOR PLILING DARE: 2000-06-03
                                                                                                                                                                                                                                                        577 GTGGTGGATTTTCGAAATACACAATGATTCCT 608
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60.0%; Pred. No. 1.
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CURRENT FILING DATE: 2001-05-29
NUMBER OF SEQ ID NOS: 10912
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Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 8693, Application US/09867701
Patent No. US20020132237A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Feen, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 60.0°
Matches 54; Conservative
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APPLICANT: Agiate, Paul A.
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US-09-867-701-8693
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LENGTH: 286
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  166 AGAAGAAACCAACGTTGAGAGGAATGGGTGTAGCAAAGCTCGAGCGTCAGAGATCGAAG 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     139 AGAGGAACTGAAGARGGCTGAGGGGAAAGTGAGGAAAGAGAGAGAGAGTATGTGATACCAAA 198
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Sequence 4232, Application US/09938842A Patent No. US20020160378A1 GENERAL INFORMATION:

IS-09-938-842A-4232/C

Query Match 3.5%; Score 33; DB 10; Length 511; Best Local Similarity 53.5%; Pred. No. 1; Matches 69; Conservative 0; Mismatches 60; Indels Matches 69; Conservative 1)

OTHER INCORMATION: MAP TO ACOL5897.3
OTHER INCORMATION: REPRESSED IN ADOLFF LITTURE, SIGNAL - 0.94
OTHER INCORMATION: EXPERSSED IN PLACEFMA, SIGNAL - 0.82
OTHER INCORMATION: EXPERSSED IN BEAR M. SIGNAL - 1.1.
OTHER INCORMATION: EXPERSSED IN BONE MARROW, SIGNAL - 0.94
OTHER INCORMATION: EXPERSSED IN JUNG, SIGNAL - 1.1.A.
OTHER INCOMMATION: EXPERSSED IN EVAIL LITURE, SIGNAL - 0.94
S-09-864-761-12665

TYPE: DNA ORGANISM: Homo sapiens

LENGTH: 511

PRIOR APPLICATION WUNDER: US 60/234,687
PRIOR APPLICATION WUNDER: US 09/609.408
PRIOR PRILING DATE: 2000-06-30 9/609.408
PRIOR FILING DATE: 2000-06-30 9/714,203
PRIOR FILING DATE: 2001-01-29
WORDER OF SEQ ID NOS: 410.01

FILING DATE: 2001-01-30

3.5%; Score 32.8; DB 9; Length 1381; 47.2%; Pred. No. 2.2; tive 0; Mismatches 112; Indels 0

Matches 100; Conservative

Best Local Similarity

ORGANISM: Arabidopsis thaliana

TYPE: DNA Query Match

NUMBER OF SEQ ID NOS: 5379 SEQ ID NO 4232 LENGTH: 1381

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        531 AAGAAACGTTGGATGGTGATCAGAATAATGTAGTTCGATCCAACGGTGGTGGATTTTCG 590
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                236 ATTGACAAACTCTGTCCTATTAGTATTTACTGTTCTGCTGGTTATTTCCTGTTGTTCTTGG 295
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EXPRESED IN BONE MARROW, SIGNAL = 1.8
EXPRESED IN LUNG, SIGNAL = 1.9
EXPRESED IN BRAIN, SIGNAL = 1.3
EXPRESED IN ADULT LIVER, SIGNAL = 1.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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SYREBSED IN FFFAL LIVER, SIGNAL
EXPRESSED IN PLACENTA, SIGNAL = 0.9
EXPRESSED IN HELAO, SIGNAL = 0.9
EXPRESSED IN HELA SIGNAL = 1.1
EXPRESSED IN HELA SIGNAL = 1.1
EXPRESSED IN HELA SIGNAL = 1.2
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16.8%; Pred. No. 1.6;
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                                                                          REGION PREDICATION MAGRES 126

PRICOR PILLING DATE: 2000-09-03

PRICOR PELLING DATE: 2000-09-03

PRICOR PELLING DATE: 2000-09-03

PRICOR PELLING DATE: 2000-09-27

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PRICOR PELLING DATE: 2001-01-01-00

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PRICOR PELLING DATE: 2001-01-01-00

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PRICOR PELLING DATE: 2001-01-01-00

PRICOR PELLING DA
    FILING DATE: 2000-02-04
APPLICATION NUMBER: US 60/207,456
FILING DATE: 2000-05-26
APPLICATION NUMBER: US 09/632,366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
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ORGANISM: Homo sapiens
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Matches 102; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  531 AAGAAACGTTTGGATGGTGATCAGAATAATGTAGTTCGATCCAACGGTGGTGGATTTTCG 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94 AAGGGAACTAACTCTGTTGTTCAGAGCAATGTCCCCTATCCTATTGGTACTTCCTGTTCC 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                591 AAATACACAATGATTCCTCCTCCGATGAACGCTACGATCAGTATCTTCTTCAATCAGT 650
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: MAP TO AC010904.2
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL - 5.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 16334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.4%; Score 32.4; DB 10;
46.8%; Pred. No. 1.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              651 CATCACAGAGCCAAGGTTTCCTTTATGATCATAG 688
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                 APPLICATION NUMBER: PCT/US01/00666
FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
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Patent No. US20020048763A1
GENERAL INFORMATION:
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Matches 102; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
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US-09-864-761-1484
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296 CATCTCCTGTCGTTAGCATTTCCTGTTTTATAACAG 333

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Sequence 15622, Application US/09864761 Patent No. US20020048763A1

ESULT 14 IS-09-864-761-15622/C

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APPLICANT Oliveire. Wasso A. APPLICANT Oliveire. Assoc A. APPLICANT HOUSE. Assoc A. APPLICANT HOUSE. G. ASSOC A. APPLICANT HOUSE. G. ASSOC A. APPLICANT HOUSE. G. ASSOC A. APPLICANT HOUSE. G. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. ASSOC A. A
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129 GGTTTTGTTGAGACCTCCTCCACTACTCATGAGCTCTTCAATCTCAAATCCTCAAATG 488
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Pred. No. 2.9;
0; Mismatches 33;
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Job time : 792 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            762 CTCTGTGGTTTCTGAATTCTCGAAG 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 11, Application US/09864921
Patent No. US20020176853A1
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Stehlik, Christian
Damiano, Jason S.
Lee, Sug-Hyung
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Best Local Similarity 61.2%;
Matches 52; Conservative
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APPLICANT: Reed, John C.
APPLICANT: Pio, Frederick F.
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) LOCATION: (1)...(930)
US-09-864-921-11
                                                                                                                                                                      489 TITAACGCIIC 499
                                                                                                                                                                                                                     24 TICTGCCCTTC 14
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APPLICANT:
APPLICANT:
APPLICANT:
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APPLICANT: REAL INVORMATION:

APPLICANT: REAL PROPERTY ON. CHARLE STATE O.

APPLICANT: REAL PROPERTY ON. CHARLE STATE O.

APPLICANT: REAL PROPERTY ON. CHARLE STATE O.

TITLE OF INVERTYON: THAN EXCHARLE STON ANALYSIS BY MICROARRAY

CURRENT APPLICATION NUMBER: US 60/130, 312

PRIOR APPLICATION NUMBER: 05 60/130, 312

PROPERTY APPLICATION NUMBER: 05 60/130, 312

PROPERTY APPLICATION NUMBER: 05 60/130, 312

PROPERTY APPLICATION NUMBER: 05 60/130, 312

PROPERTY APPLICATION NUMBER: 05 60/130, 312

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PROPERTY APPLICATION NUMBER: 05 60/130, 312

PROPERTY APPLICATION NUMBER: 05 60/130, 312

PROPERTY APPLICATION NUMBER: 2010-10-00

PROPERTY APPLICATION NUMBER: 2010-10-00

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369 ATCTATTGTGGTGGAGTCGGGTCGGGTCAGGTTATGATCGACCGGGTTATTTCTCCATGG 428

Ouery Match 3.4%; Score 32.4; DB 10; Length 470; Best Local Similarity 52.7%; Pred; No. 1.6; Matches 69; Conservative 0; Mismatches 62; Indels 0; Matches 62; Conservative 0; Mismatches 62; Indels 0.

OTHER INFORMATION: MAP TO AC009724.1 OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 5.1

NAME/KEY: unsure 13-09-864-761-15622

TYPE: DNA ORGANISM: Homo sapiens

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Drosophila melanog
Drosophila melanog
Novel human diagno
Novel human diagno
Drosophila melanog
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                                                                                                                           ; Search time 70 Seconds
(without alignments)
597.724 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1. $\text{$102} \text{$102} 
                                                                                                                                                                                                                                                         1 MATSLFFMSTDONSVGNPND......TTSSLVGDCSPNTIDLSLKL 314
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                                                                                                                                                                                                                                                                                                                                                                                                               908470
GenCore version 5.1.3
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                            otal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                908470 seqs, 133250620 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                              January 25, 2003, 22:37:22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ost-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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ABB70882
AB64282
ABG13205
ABG13382
ABB63438
ABB71639
ABB71639
ABB71639
                                                                                      protein search, using sw model
                                                                                                                                                                                                                                                                                                    BLOSUM62
Gapop 10.0 , Gapext
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ALIGNMENTS

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Sporocyteless; spl; melocyte formation; plant sterility; seedless fruit; pollenless flower; bs element.
                                                                                                                                                                                                  Arabidopsis thaliana sporocyteless spl protein.
                                          AAB26111 standard; Protein; 314 AA
                                                                                                                                               (first entry)
                                                                                                                                               30-JAN-2001
                                                                                             AAB26111;
RESULT 1
                       AAB26111
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Arabidopsis thaliana

/label= unknown /note= "shown as Lrg, encoded by AGA" Location/Qualifiers 23 Misc-difference

99WO-SG00023 99WO-SG00023 22-MAR-1999; WO200056907-A1 22-MAR-1999; 28-SEP-2000

(MOLE-) INST MOLECULAR AGROBIOLOGY. Ye D, Yang W, Sundaresan V, WPI; 2000-594578/56

'n

us-09-701-023-4.rag

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The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp. wipo.inf.pub.published.pcL.sequences.
                                                                                                                                                              New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
                                                                                                                                                                                                                                                                     The invention relates to an isolated nucleic acid detection reagent capable of detection and more genes from Drosophila. The invention capable in developmental biology and in elucidating cell signalling and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               163 MFNASSNNRCDTCFKKKR-----LDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQS 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43 RGRKPGSKTGQQKQKKFPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNATRL 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         103 PVPVDPGVVLQGFPSSLGSNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQ 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----VLRG-PSTFANAFLY---VGLGTVALGLVIAFVGTGEKGFKTTELRLIGPSL 117
                                                                                                                                                                                                                                                                                                                         cell-cell interactions in higher eukaryotes for the development of insecticides, therspectics and pharmacentical drugs. The invention blatchess genomic DNA sequences (Malidi76-Malidi11), expressed DNA sequences (ABLid176-Malidi178) and the encoded proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                118 IGNKIANGKCQLNIKKTRKKNGNKIDADHTTSLLRNESKRPKYPIA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          217 DHHORSOGFLYDHRIARAASVSASS-----TIIN---PYFNEATNHTGPME 259
                                                                                                                                                                                                                                      Disclosure; SEQ ID NO 39438; 21pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RGRRCSVQDQQQQATCHRRW----VKRNRIQD-----ASLGGSSDDEDFLG-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.4%; Score 104; DB 22;
23.5%; Pred. No. 0.24;
Lve 31; Mismatches 86;
                                                                        Myers EW;
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                                                                        PWD,
  11-JUL-2000; 2000US-0614150.
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11-JUL-2000; 2000US-0614150.
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                                                                        Adams M,
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ses 55; Conserv
                                    (PEKE ) PE CORP NY
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                                                                                                                            N-PSDB; ABL14985
                                                                                                                                                                                                  interactions -
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                                                                                                                                     The present sequence is the Arabidopsis thalians sporocyteless (SPL) proceed the Arabidopsis that formulated in the formit of furnosporocytes in male plants. The coding sequence for male plants and megasporocytes in female plants. The coding sequence for the maran gene was isobarched from a collection of transpoars due to its male and female sterile phenotype. The mutation is caused by the causing at base pair duplication. The identification of the sterile to phenotype in plants caused by the insertion of this element means that it can be used to produce transpent plants within contain the De element of an easily engage and tiples of the gene can be production of the second means that it can be used to produce transpent plants with a larger bloadston of seedless fruits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 SNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKR 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 LRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKR 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STIINPYFNEATNHIGPMEEFGSYMEGNPRNGSGGVKEYEFFPGKYGERVSVVATISSLV 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sporcoyteless nucleic acids and polypeptides, useful for controlling sprocyte or melocyte formation in plants for producing transgenics that bear seedless fruits and/or pollenless flowers.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MATSLFFMSTDONSVGNPNDLLXNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPT 60
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                                                                                                                                                                                                                                                                                                                                                                                                 Length 314;
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                                                                                                                                                                                                                                                                                                                                                                                               Score 1628; DB 21;
Pred. No. 5.6e-154;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                                                                                         Claim 10; Fig 3; 65pp; English.
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ilarity 99.7%;
Conservative
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Matches 313; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IRDKLMERRNRRTG-----AVAA 108
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        155 LSSISNPOMFNASSNNRCD---TCF------KKKRLDGDQNNVVRSNGGGFS 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             35 IRTETLKSRGRKPGSKTGQQKQKRPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVAS 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              156 - EVYTKVPALDVAARHRCDNEKTCHTSHGSVMAETAVINHKRRKNSPR--IVOSNDLTBA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   198 KYTMIPPPMNGYDQ----YLLQSDHHQRSQGFLYDH-----RIARAASVSASSTTINPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated polynucleotide and encoded polypeptides, useful in
aganostics, foresics, gene mapping, identification of mutations
responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 6.2%; Score 102; DB 22; Length 430; Best Local Similarity 21.9%; Pred. No. 0.25; Makerides 61; Conservative 39; Makartches 94; Indels 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   213 AYSL----SRDOKRMLYLF-VDOIRKSDGTLOEHDGICEIHVAKYAEIFG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              248 FNEATNHIGPMEEFGSYMEGN--PRNGSGGVKEYEFFP 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---LTSAEASIEEFRGEGSGNYRPEEDAGDEKGYESFP 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 20; SEQ ID No 43564; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                Tang YT;
                                                                                                     30-MAR-2001; 2001WO-US08631
                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-639362/73.
N-PSDB; AAS77392.
                                                                                                                                                                                                                                                                                                                                                Drmanac RT, Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 430 AA;
                                                                                                                                                                                                                                                                           (HYSE-) HYSEQ INC
                                                                                                                                                                                                     23-AUG-2000;
                                                                                                                                                                     31-MAR-2000;
                                11-0CT-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      is.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an isolated nucleic acid detection reagent repeals of detecting 100 or more gauses from Drosphila. The invention is useful. In developmental biology and in alloidating cell signaling and call contentions in injure detayloses for the development of insertices, therapeutics and pharmaceutical drugs. The invention sequence (Abin3719, Abin371), expressed DNA sequence (Abin3719, Abin3717), and the emoded proteins its sequence data for this patent did not form part of the printed its specification in the abouting the electronic former directly from WIPPO To the process.
                                                                                                                                                                                                                                                                     New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       023 LKSILKKLQMGGGQQEEAGPGTGTGAGAVMGTGSKVNSSASQKGQ-GLPAEP--TLEGPP 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1127 --NSSSH-----SNN------SNN------S 1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1208 GRGLVGGVGSASASMLPAGAGASASASTSTSASYVVECSASSNQILHAQSTTDINLNL 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            964 FLSTYESTISS-TSISTNTSASASASASASASDSNSRQLQYVPLPLSPESNETMERRK 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1148 VAFPFPVPIAPASGSVPLPLEPGVSNVWSPTLTLVTPINSPQESFAFPAQLQGELGGHGT 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  57 KKPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFP 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       117 SS------LGSNRIYCG-GVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQ 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  163 MFNASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRS 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        223 OGFLYDHRIARAAS-----GSASSTTINPYFNEATNHTGPMEEF-----GSYME 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GNPRNGSGGVKEYEFFPGKYGERVSVVATTS---SLVGDCS-----PNTIDLSLKL 314
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----PGSKTGQQKQ 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; chromosome mapping; gene mapping; gene therapy; forensic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6.3%; Score 103; DB 22; Length 1693; 21.4%; Pred, No. 1.5;
Live 44; Mismatches 131; Indels 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              food supplement; medical imaging; diagnostic; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; SEQ ID NO 19638; 21pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7 FMSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRK---
                                                                                                     Myers EW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel human diagnostic protein #13196
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                                                                                                     PWD.
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                                                                                                Adams M,
                                                                                                                                                                WPI; 2001-656860/75.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1693 AA;
                          (PEKE ) PE CORP NY.
                                                                                                                                                                                                     N-PSDB; ABL08385
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                                                                                                     Venter JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence
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14;

Mon Jan 27 14:05:55 2003

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The invention relates to an isolated nucleic and detection reagent capable so of detecting 1000 or more genes from Drosophila. The Invention is useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher everyeary to the development of inseticides, therapeutics and pharmaceutical drugs. The invention discloses genome, DN sequences (ABLOSTA) and the encoded probe in expressed DNA sequences (ABLOSTA) and the encoded probe in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO art tip, w.lpo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
    156 -EVYTKVFALDVAARHRCDNLKTCHTSHGSVMAETAVINHKKRKNSPR--IVOSNDLTEA 212
                                                                                     198 KYTMIPPPMNGYDQ----YLLQSDHHQRSQGFLYDH-----RIARAASVSASSTTINPY 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                309 PREVIEHT-----DNEVRSEDLEELGGTVSYVEIDEMIGGOO------VVVCS 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 RIEBERKQLAAATVGDT---SSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIYCGGV 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels 136; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 17106; 21pp + Sequence Listing; English.
                                                                                                                                               213 AYSL----SRDOKRMLYLF-VDOIRKSDGTLOEHDGICEIHVAKYAEIFG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6.2%; Score 102; DB 22; Length 631; 19.1%; Pred. No. 0.44;
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                                                                                                                                                                                                         248 FNEATNHTGPMEEFGSYMEGN--PRNGSGGVKEYEFFP
                                                                                                                                                                                                                                                               258 ---LTSAEASIEFFRGEGSGNYRPEEDAGDEKGYESFP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Myers EW;
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11-JUL-2000; 2000US-0614150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-MAR-2002 (first entry)
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CC polypeptide (II) sequences (I) is useful as hybridisation probes.

CC polyperase chair section (CSP) primers. Oligomers, and for chromosome conditions are chair section (CSP) primers. Oligomers, and for chromosome can observe the section (CSP) primers. Oligomers, and for chromosome conditions are also used in dispensions as expenses designance tags.

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                                                                                                                                                                                                                                Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.
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21.9%; Pred, No. 0.25;
Lve 39; Mismatches
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                                                                                                                                                                          Novel human diagnostic protein #13373.
ABG13382 standard; Protein; 430 AA.
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                                                                                  FKK-KRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRS---QGFLYDHRI 231
                                                                                                                  VQAIRHLEGD--HLFADGSGGQEKFG------QQQNLQQHHHQMSGVHHQQLQHHRL 509
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                                                                                                                                                                                                                       247 --YFNEAT-----NHTGPMEEFGSYMEGNPRNGSGGVKEYEFFPGKYGERVSVVATTS 297
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                                               TSSAAMLQPILQAAIKATPKVEVERIHEKIVKVKTEKHDLPSMQTAPHYQHSHRQNLETI 460
               GSGQVMIDPVISP------WGFVETSSTTHELSSISNPQMFNASSNNRCDTC
                                                                                                                                                       -- SVSASSTIINP
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11-JUL-2000; 2000US-0614150.
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                                                                                                                                                                                                                                                                                          298 SLVGDCSPNTI 308
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                                                                                                                                                                                -TEKPNKPLVNGEAIA 401
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                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                 436 STASNHSSSQSSSRKSYLSSSSSSSSHHKSSSSSSSRHSSRECSKCYKRSKI 493
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Score 102; DB 22;
Pred. No. 1.4;
28; Mismatches 63;
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Matches 72; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-PSDB; ABL10327
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Page

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Gaps

70:

Indels

Mismatches 120;

Pred. No.

-SKKRMGSVGP 732

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223

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ABB71639 RESULT

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67 AKLERQRIEEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIYC 126
                                                                                                                                                                                                     656 ---DROR-----STIPMSSNRSSASSSTI-----PPKLAASEVPAATSGS---- 692
                                                                                                                                                                                                                                             GGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKRL---- 181
                                                                                                                                                                                                                                                                                                                                  -DGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSAS 240
                                                                                                                                                                                                                                                                                                                                                                               733 SGGSNGORORSASGSNSGYOOVPPPSSNSRSSIOOONOHOKOO-----VQOKOAPSOO 785
                                                                MSTDQNSVGNPNDLLR-NTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPTLRGMGV 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          developmental biology; cell signalling; insecticide;
                                                                                                            605 MEQQQHPRSNSSNNRRGSSSLAGTSNGGNNKDKRNSTGSNSSSSSGYETQQ-
                                                                                                                                                                                                                                                                                                                                                                                                                       241 STTINPYFNEATNHTGPMEEFG----SYMEGNPRNGSGGVKEYEF 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   786 OGOGOGOYHOOAKHPSPSOOLAAAHAYAHATADTDSSATPRYDF 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Drosophila melanogaster polypeptide SEO ID NO 10470.
                                                                                                                                                                                                                                                                                      693 -ASGTSKORMPPOOSDYNSYNSNNAOHVASN-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABB61226 standard; Protein; 607
                       45
17.5%;
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2000US-0614150.
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                       Conservative
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Best Local Similarity
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11-JUL-2000;
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                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
                                                                                        GV------AKLERQRIEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGV 110
                                                                                                                                 222
                                        112 FLISVNGLNVSKLPHETV--VQLIGNSFGSIRMQIAENY----YSDSSDEENAHATLRGO 165
                                                                                                                                                                             111 VLOGFPSSLGSNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSN- 169
                                                                                                                                                                                                                      -----PLTANLSKAADVANVSAMVRAVGS--AALECRVIVGYLGTIEMPKQISHSSKL 273
                                                                                                                                                                                                                                                                  170 NRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDH 229
                                                                                                                                                                                                                                                                                                              -----EMCITP-----DSLSLOSS----SGGVLATY 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated nucleic acid detection reagent
6 FFMSTDQNSVGN-PNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKFTLRGM
                                                                                                                                 166 LLAASLRHKPRFLHHKAKLHRLRNSPQKKLNPPEAVEPHKSKSS-PDHPTLKPVLEDP--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Drosophila; developmental biology; cell signalling; insecticide;
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                                                                                                                                                                                                                                                                                                                                                                                                316 SSARLNFVSSSSESENRFFGLVTSAVHNTQIEE-----EYEPSAGS 356
                                                                                                                                                                                                                                                                                                                                                          230 RIARAASVSASSTIINPYFNEAIN--HTGPMBEFGSYMEGNPRNGS 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Drosophila melanogaster polypeptide SEQ ID NO 41709.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABB71639 standard; Protein; 1059 AA.
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                                                                                                                                                                                                                                                                                                              274 OTVRSCIRKLROEKROPTIV---
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N-PSDB; ABL15742.
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The invention relates to an isolated unclaid acid detection reagent espable of detecting 1000 or more genes from brosophile. The invention is useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher everyotes for the development of insectiodes, therspectics and pharmaceutical drugs. The invention discusses genomic DNs aspeces (ABLIGETS-ARLIGATS) and the encoded processe (ABLIGATS) and the encoded processe (ABB57/37-ABB72072).
The sequence dots for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences. New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell Disclosure; SEO ID NO 10470; 21pp + Sequence Listing; English. 3 Myers Li PWD,

6.0%; Similarity 607 AA; Sequence Query Match Local o

Gaps -----GRKPGSK 50 87; Length 607; Indels ; Score 98.5; DB 22; ; Pred, No. 0.93; 55; Mismatches 117; 8 MSTDQNSVG---NPNDLLRNTRLVVNSSGEI--RTETLKSR---Conservative 61; Matches

13;

TGGOKOKKPTLRGMGVAKLERQRIEEEKKQLAAATVGDISSVAS---ISNNATRLPVPVD 107 107 MITIKKPLGPNNNNNKPAPILLKOKSNVELSYRIKELKKSFGGHDAKQFDNIGIVKGIP 166

Ω

276 VKEYE--FFPGKYGERVSVV 293

354 MEBGEPMFQTTQYNDLLQLI 373

ABB68633 standard; Protein; 603 AA.

(first entry) 26-MAR-2002 ABB68633;

Drosophila; developmental biology; cell signalling; insecticide; Drosophila melanogaster polypeptide SEQ ID NO 32691 pharmaceutical

Drosophila melanogaster.

WO200171042-A2.

27-SEP-2001.

23-MAR-2001; 2001WO-US09231

23-MAR-2000; 2000US-191637P. 11-JUL-2000; 2000US-0514150.

Venter JC, Adams M,

(PEKE) PE CORP NY

Myers EW; PWD, 3 WPI; 2001-656860/75. N-PSDB; ABL12736 New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell Disclosure; SEQ ID NO 32691; 21pp + Sequence Listing; English interactions -

The invention relates to an isolated nucleic acid detection reagent capable of detection look or more guess from Drosophila. The invention is useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher everyoles for the development of inscertiodes, therepeutics and pharmaceutical drugs. The invention

WIPO The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from at fip. wipo.inr/pub/published_pct_sequences. genomic DNA sequences (ABL16176-ABL30511), expressed DNA (ABL01840-ABL16175) and the encoded proteins ABB57737-ABB72072). discloses 888888888

603 AA; Sequence

45; Mismatches 115; Indels 108; DB 22; Length 603; Query Match 6.0%; Score 98; Best Local Similarity 21.2%; Pred. No. Matches 72; Conservative 45; Mismatc

15;

88 DISSVASISNNATREPVPVD----PGVVLQGFPSSLGSNRIYCGGVGSGQVMIDPVI--- 140 Gaps 36 RIETL-KSRGRKPGSKTGQQ----KQKKPTLRGMGVAKLERQRIE---EEKKQLAAATVG 87

> 용 ã 8 ò g ó 8 용 à g

106 PPSTLRSDNNN--RLPFALSHLNLPGL-----GLGV-----GVGVGG-HINPALLLD 149 SPDECTPPEYAYQHLSSVA----TTNSSTSLESSCELGELSGSQNSVYWASMCGEVST SPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKRLDGDQNNV---141

318 OLGAYLSSSSGVGGG----HDFOGGSFPEESTPDETDGTL 353

AAE01962

Ā AAE01962 standard; Protein; 669

31-JUL-2001 (first entry) AAE01962:

Arabidopsis thaliana transcription factor G1493.

Transcription factor; trait modification; structural characteristic; developmental characteristic; gene therapy; agricultural biotechnology.

Arabidopsis thaliana

242..289 /note= "Conserved domain" Location/Qualifiers Domain Key V

WO200136444-A1

25-MAY-2001

14-NOV-2000; 2000WO-US31325 99US-0166228 17-APR-2000; 2000US-0197899 22-AUG-2000; 2000US-0227439 17-NOV-1999;

MENDEL BIOTECHNOLOGY INC RIECHMANN J L. REUBER L. KEDDIE J. (MEND-) (RIEC/)

KEDDIE J. RATCLIFFE O. (REUB/) (KEDD/) (RATC/) (HEAR/)

Mon Jan 27 14:05:55 2003

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(Adebs)737-Amp37022).
The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at the Ampo.int/pub/published_pet_sequences.
                                                                                                                                                                                                                                                                                                                                                                New isolated nucleic acid detection reagent for detecting 1000 or more ignees from Drosophila and for elucidating cell signalling and cell-cell interactions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an isolated nucleic soid detection respant copable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating call signalling actions. Call.call interactions in Migher enhanced for the development of inserticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNs appenders (Mistlioffor-Manolish), expressed DNA sequences (ABLIOFFOR-MANOLISH), expressed DNA sequences (ABLIOFFOR-MANOLISH).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97 GDTSSVASISNNATRLPVPVDPGVVLQGFPSS---LGSNRIYCGGVGSGQVMIDPVI--- 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        174 TCFKKKRLDGD-----QNNVVRSNG-----GGFSKYTMIPPPMNGYDQYLLQSDHHQ- 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----SSISNPQMFNASSNNRCD 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83 HHSKHSPSGGASGGDASPTSNLLGMKNNGLGLVVGNCDSLSSSPSQPQMHAGSAS---- 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     221 -RSQGFLYDHRIARAASVSASSTTINPYFNEATNHTGPMEEF----GSYMEGNPRUGSGG 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----LPGNDEVSLRNNFMQAGGFFNRKSCGGLPNLNLNRPPQLHQQQHQQQHQQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 11961; 21pp + Sequence Listing; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Drosophila melanogaster polypeptide SEQ ID NO 12060.
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                                                                                                                                                                                                                                                                                Myers EW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141 ----SPWGFV----ETSSTTHEL-----
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11-JUL-2000; 2000US-0614150.
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                  Drosophila melanogaster.
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les 53; Conserv
                                                                                                                                                                                                                                         (PEKE ) PE CORP NY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21;
                                                                                                                                                                                                                                                                                                               The present sequence is Archidosis thalians transcription factor (3143 * This sequence is homologous to transcription factor (3177 * The transcription factors are used to modify truit a secontared with with Structural or developmental characteristics of plants, e.g. soybean, wither, corn, potteo, cortor, rice, olissed rape, sunloves, alialia, signs come, tuff, benan, blackberry, blueberry, strawberry, raspberry cantalouse, carcot, cauliflower, coffee, cucumber, eagplant, grapes, honey dew, lettuce, mango, melon, papay, peas, watermelon, pincapple, sphach, squeto, corn, tobacco, tomato, pepepers, onlon, rosaccous fulls, and/or vegetohic brassians when their expression levels and/or vegetohic brassians when their expression levels are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   altered The manipulation of transcription factor levels in plants offers great potential in agricultural biorechmology for modifying plant's traits. The transcription factors are also used in gene therapy.
                                                                               Samaha R;
                                                                                                                                                                                                 Nucleic acids encoding plant transcription factor polypeptides, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         350 LGRP-AMVSKSGLPVSSIVDERSIFSFDNTKTRFGEGLGHHGQQPQQQPQMNLLHGVPTG 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70 ERGRIE-----EEKKQLAAATVGDTSSVASISNNATRLP-----VPVDPGVVLQGFPSS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         409 LOGGLPMGNRMSIQQOIAAVRAGN----SVQNNGMLMPLAGQQSLPRGPPPMLTSSQSS 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              119 IG----SNRI--YCGCVGSGQVMIDPVISPWGFVETSSTTHELSSIS----NPQM----F 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           165 NASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLL-QSDHHQRSQ 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   523 PLASAPGISVPVRKAT---SYQEEVNSSEAGF----ITP---SYDMFTTRQNDWDLRNI 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          224 GFLYD-BRIARAASVSAS-----STTINPYFNEATNH-----TGPMEEFGS 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               572 GIAFDSHQDSESAAFSASEAYSSSSMSRHNTTV----AATEHGRNHQOPPSGMVQHHQV 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15 VCNPNDLLRNTRLVVNSSGEIRT ---- ETLKSRGRKPGSKTGQQKQKKPTLRGM-GVAKL 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      464 IROPMLSNRISERSGESGRNNIPESSRVLPTSYTNL-TTOHSSSSMPYNNFOPELPVNSF
                                                                                                                                                                                                                for altering the developmental and structural characteristics of plants, e.g. corn, potato and cotton plants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fig. 1. Sove 96.5; DB 22; Length 669; Local Similarity 23.78; Pred. No. 1.7; conservative (**)
                                                                               Keddie J, Ratcliffe O, Heard J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Drosophila melanogaster polypeptide SEQ ID NO 11961.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            627 YADGN--GGSVRVK----SERVATDTAT 648
                                                                                                                                                                                                                                                                             Claim 4; Page 106-108; 140pp; English.
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                                                                               Reuber
                                                                                                                                   2001-335996/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   669 AA;
(SAMA/) SAMAHA R.
(YUGG/) YU G.
                                                                                                                                                            N-PSDB; AAD05840.
                                       (JIAN/) JIANG C.
                                                                            Riechmann JL, F
Yu G, Jiang C;
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Delivering the invention relates to isolated polyworloched (i) and polymerase chair reaction (ref.) primare, oligonerase chair reaction (ref.) primare, oligonerase chair reaction (ref.) primare, oligoneras, and for chromosome and gene mapping, and in recombinant production of (II). The response properties are also used in disponsers as acquence tags for identifying expressed genes. (II) is useful in gene therapy techniques to response horms electivity of (II) of the disponsers. (II) as useful in gene therapy techniques (II) (II), (II) is useful for generating antibodies against it, detecting or (II), (II), as useful in the litissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical disponders, forensics, gene and polyworlectic esquences have applications for disponsible for generating protein expression or biological activity. Of the polypeptide and polyworlectic esquences have applications for disponsible for generate gene mapping, identification of mutations for applications and products or other traits to assess biodiversity and to produce other types of data and products dependent over human and actid sequences. Mesonology, represent invest human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   770 DEDGVGGPYTIFVPNNEALNNWKDGTLDYLLSPEVFIRDKLMERRNRRTG------ 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 59 PTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            119 LGSNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCD---TC 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   F-----KKKRLDGDONNVVRSNGGGFSKYTMIPPPPMNGYDQ----YLLQSD 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         915 HTSHGSVMAETAVINHKKRKNSPR--IVQSNDLTEAAYSL-----SRDQKRMLYLF-VD 965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----RIEKARIWEVTDRTVRTWIGE--AVAAAAADGVTFSVPVTP----HTFRHS 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              865 YAMHMLYAG-----IPLKVLQSLMGHKSISST----EVYTKVFALDVAARHRCDNLKTC 914
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11 DONSVGNP-----NDLERNTR-----LVVNSSGEIRTETLKSRGRKPGSKTGOOKOKK 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated polynucleotide and encoded polypeptides, useful in
diagnostics, forensics, gene mapping, identification of mutations
responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 20; SEQ ID No 43608; 103pp; English.
                                                                                                                                        30-MAR-2001; 2001WO-US08631.
                                                                                                                                                                                     2000US-0540217
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                                                                                                                                                                                                                                                                                                                                                                               WPI: 2001-639362/73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1098 AA;
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Matches 66; Conserv
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                                                                                                                                                                                                                                                                        (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; AAS77436
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (A8657737-A8872072). The sequence data for this part of the printed the sequence data for this patient directly was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated nucleic acid detection reagent capable of detection relates to an isolated more genes from Drosophila. The invention useru in developmental biology and in elucidating cell signalling an cell-cell interactions in higher entangones for the abusingment of miscatches, therapeutics and pharmaceutical drugs. The invention discloses enomia to mesopenes (ARLIGIG-ARIJOSI), expressed DNA discloses enomia to mesopenes (ARILIGIG-ARIJOSI).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ----STEWGFV----ETSSTTHEL-----SSISNPOMFNASSNNRCD 173
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 12060; 21pp + Sequence Listing; English.
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                                                                                                                                                                                                                                                                                                                                                      Myers EW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel human diagnostic protein #13240.
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11-JUL-2000; 2000US-0614150.
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Best Local Similarity 22.1%
Matches 53; Conservative
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Drosophila melanogaster
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                                                                                                       27-SEP-2001
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Tang YT;

17

Length 1098. Indels

DB 22; 86

5.9%; Score 96.5; DE

21.3%;

47; Mismatches

Search completed: January 26, 2003, 00:03:36 Job time: 78 secs

GenCore version 5.1,3 Copyright (c) 1993 - 2003 Compugen Ltd.

- protein search, using sw model M protein January 26, 2003, 00:03:42; Search time 23 Seconds ino on:

(without alignments) 401.687 Million cell updates/sec US-09-701-023-4 itle:

1 MATSLFFMSTDQNSVGNPND.......TISSLVGDCSPNTIDLSLKL 314 erfect score: ednence:

262574 seqs, 29422922 residues BLOSUM62 Gapop 10.0 , Gapext 0.5 earched:

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Listing first 45 summaries Maximum Match 100% 'ost-processing: Minimum Match 0%

/cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:* Issued_Patents_AA:* atabase :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Description

% Query Match Length DB Score No.

Appli	Appli	Appli	, Appl	Appli	Appli	Appli	Appli	Appli	1, App	4, App	2, App	, Appl	, Appl	, Appl	Appli	, Appl	Appli	49, App	1, App	3, App	, Appl	0, App	, Appl	, Appl	, Appl	Appli
Sequence 2,	Sequence 4,	Sequence 2,	Sequence 13	Sequence 9,	Sequence 4,	Sequence 4,	Sequence 4,	Sequence 4,	Sequence 37	Sequence 48	Sequence 48	Sequence 16	Sequence 35	Sequence 16	Sequence 4,	Sequence 18	Sequence 3,	N	Sequence 30	Sequence 34	Sequence 17	Sequence 28	Sequence 17	Sequence 36	Sequence 17	Seguence 5,
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13-443B-2	4-564A-4	11-640-2	35-160-13	11-139-9	13-104-4	12-859-4	98-489-4	°	49-476-371	1-035-484	1-035-482	33-590A-16	346-128-35	-532-384-16	50-269C-4	35-432-18		470-335-249	467-602-301		29-416C-17	467-602-280	ņ		532-384-17	19-198-5
US-08-343	US-09-214-564A	US-08-89	US-09-18	US-08-44	US-08-44	US-08-44	US-08-398-	PCT-US95	US-09-14	US-09-071	US-09-07	US-08-083-5	US-08-34	US-08-53	US-08-46	US-08-185	0S-08-899	US-08-47	US-08-46	US-08-46	US-08-72		US-08-08	1	-08-	US-08-61
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5.7	5.7	5,6	5.6	5.3	5.3	е. С	5.3	5.3	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1	5.1	5.1	5.1	5.3	5.1	5.3	5.1	5.1
93	66	95	91	86.5	989	86	98	86	85.5	85.5	85.5	82	82	82	85	85	82	83.5	83.5		83	83	83	83	83	83
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SEQUENCE CHARACTERISTICS

4	2, Appli	'n	248, App	300,	342, App	279,			4, 4	179, App	179,	2, 1	2, Appli	÷	4, Appli	247, App
Seguence	Sednence	Sequence	Sedneuce	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sednence	Sequence	Seguence	Sednence	Sequence	Sequence	Sequence
US-08-899-232-4	US-09-144-085-2	US-09-100-193-3	US-08-470-335-248	US-08-467-602-300	US-08-467-602-342	US-08-467-602-279	US-09-355-166-1	US-09-620-412C-357	US-08-290-731C-4	US-09-556-877-179	US-09-620-412C-179	US-08-894-772-2	US-09-207-844-2	US-08-484-105-4	US-08-484-106-4	US-08-470-335-247
4	4	4	4	4	4	4	4	4	~	4	4	7	ņ	Н	М	4
2703	6095	513	852	852	886	603	657	683	1297	1776	1776	388	388	620	620	635
5.1	5.1	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	6.4	6.4	6.4	6.4
83	83	82.5	82	82	82	81.5	81.5	81	81	81	81	80.5	80.5	80.5	80.5	80.5

Sequence 19, Appl

1 US-08-185-432-19

2703

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18-NOV-1994
ON: 514
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REBRIA PELIZATION DATA:
APPLICATION DATA:
CLASSTORM APPLICATION DATA:
CLASSTORM APPLICATION UNBER: US No --
CLASSTORM APPLICATION WINER: US No --
CLASSTORM APPLICATION WINER: US No --
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: 230 South Fifteenth Street
Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/FR93/00494
FILING DATE: 19-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             989.6121P
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FILING DATE: 20-MAY-1992
ATTORNEY/AGENT INFORMATION:
                                                                                   Sequence 2, Application US/08343443B; Patent No. 5968734
                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Ploougastel, Beatrice
APPLICANT: Thomas, Gilles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: Floppy disk
IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19,763
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                                                                                                                                                                                                                       Aurias, Alain
Delattre, Olivier
Desmaze, Chantal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 2:
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                                                                                                                                                                                                                                                                                                                                                                                                                   Peter, Martine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Weiser, Gerard J. REGISTRATION NUMBER: 19
                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Melot, Thomas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          215-875-8394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 19102
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 19-MAY-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: ZUCMAN, JOE
TITLE OF INVENTION: OF
TITLE OF INVENTION: TF
TITLE OF INVENTION: TF
TITLE OF INVENTION: TF
TITLE OF INVENTION: TF
TITLE OF INVENTION: TF
                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Aurias
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE:
COMPUTER: IE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
RESULT 1
US-08-343-443B-2
                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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       -VMIDPVISPWGFVETSSTTHELSSI 158
                                                    152 OSSTGGYNO---PSLGYGOSNYSYPQVPGSYPMQPVTAPPSYPPTSYSSTQPTSYDQSSY 208
                                                                                                     159 SNPQMFNASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGY----DQYLL 214
                                                                                                                                                      209 SQQNTYGQPSSY--------GQQSSYGQQSSYGQQPPTSYPPQTGSYSQAPSQYSQ 256
                                                                                                                                                                                                   215 OSDHHÖRSOGFLYDHRIARAASVSASSTTINPYFNBATNHTGPMB------- 259
                                                                                                                                                                                                                                                    257 OSSSYGQOSSFRODH-----PSSMGVYGQESGGFSGPGENRSMSGPDNRGRGRG 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45; Mismatches 107; Indels 104; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----NTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPTLRG 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 4; Length 1464;
2.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF INVENTION: Transcriptional Intermediary Factor-2 NUMBER OF SEQUENCES: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P.L.L.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E: Sterne, Kessler, Goldstein & Pox
1100 New York Avenue, NW, Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1383.0130001/EKS
                                                                                                                                                                                                                                                                                                                                                     306 GFDRGGMSRGGRGGRGGM-----GSAGER 330
                                                                                                                                                                                                                                                                                                    260 -- EFGSYMEGNPRNGSGGVKEYEFFPGKYGER 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5.6%; Score 92;
7.9%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 60/021,247 FILING DATE: 12-JUL-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/891,640 FILING DATE: Herewith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC COMPALIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/08891640
Patent No. 6268173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Gronemeyer, Hinrich
APPLICANT: Voegel, Johannes
APPLICANT: Lutz, Yves
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36,688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
       115 FPSSLGSNRIYCGGVGSGQ-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chambon, Pierre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17.98;
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1464 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13 NSVGNPNDLLR----
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Best Local Similarity
Matches 56; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20005-3934
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-891-640-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-891-640-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Sharp, Phillip A. APPLICANT: Sharp, Phillip A. APPLICANT: Shou, Qiang TITLE OF INVENTION: TAY-SF: Cofector For Stimulation Of Transcriptional TITLE OF INVENTION: Elongation By HIV-1 TAY
                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                 73 RIEEEKKQLAAATVGDT-SSVASISNNATRLPVPV--------DPGVVLQG 114
                                                                                                                                                                                                                                                                                                                                                                                               100 -----TTTATVTTTQASYAAQSAYGTQPAYPAYGQQPAATAPTRPQDGNKPTETSQP 151
                                                                                                                                                                                                                                                                                                                                                                                                                                               115 FPSSLGSNRIYCGGVGSGQ------VMIDPVISPWGFVETSSTTHELSSI 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            152 OSSTGGYNQ---PSLGYGQSNYSYPQVPGSYPMQPVTAPPSYPPTSYSSTQPTSYDOSSY 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159 SUPQMFNASSNNRCDTCFKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGY----DQYLL 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          209 SOONIYGOPSSY-----GQQSSYGQQSSYGQOPPISYPPQTGSYSQAPSQYSQ 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            257 OSSSYGOOSSFRODH-----PSSNGVYGOESGGFSGPGENRSMSGPDNRGRGRG 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                             45 GOPTDVSYTQAQTTATYGQ--TAYATSYGQPPTGYTTPTAPQAYSQP-VQGYGTGAYD-- 99
                                                                                                                                                                                                                                                16 GNPNDLIRNTRLVVNSSGEIRTETLKSRGRKP---GSKTGQQKQKKPTLRGMGVAKLERQ 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16 GNPNDLLRNTRLVVNSSGEIRTETLKSRGRKP---GSKTGQQKQKKFTLRGMGVAKLERQ 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    45 GOPTDVSYTQAQTTATYGO--TAYATSYGOPPTGYTTPTAPQAYSQP-VQGYGTGAYD-- 99
                                                                                                                                                                                                   34; Mismatches 127; Indels 104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      34; Mismatches 127; Indels 104;
                                                                                                                                                  5.7%; Score 93; DB 2; Length 656;
20.2%; Pred. No. 0.5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           215 QSDHHQRSQGFLYDHRIARAASVSASSTTINPYFNEATNHTGPME-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             260 -- EFGSYMEGNPRNGSGGVKEYEFFPGKYGER 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          306 GFDRGGMSRGGRGGRGGM----GSAGER 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/214,564A CURRENT FILING DATE: 1999-08-18 PRIOR APPLICATION NUMBER: US 60/021,218 PRIOR FILING DATE: 1956-07-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IMBER: PCT/US97/11713
1997-07-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5.7%; Score 93;
20.2%; Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4, Application US/09214564A Patent No. 6150515 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1996-12-13
656 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: M0656/7042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67; Conservative
                                                                                                                                                                        Best Local Similarity 20.2
Matches 67; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1997-0
                                                TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-343-443B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1996-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
                          amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-214-564A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-214-564A-4
   ENGTH
                                                                                                                                                  Query Match
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Matches
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64 MGVAKLERQRIEEEKKQLAAATVGDTSSVASISN-----NATRLPVPVDPGVVLOGFPS 117

73 RIEBERKQLAAATVGDT-SSVASISNNATRLPVPV-----------------------DPGVVLQG 114

278	UN LIZE KLYGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	Oy 183 GDONNVPRINGGGESKYTMIPPPMIGYDOYILGSDHIQRSQTGFLYDHRIARAASVSA 239		Db 377 SATHNHNNSNPYQPGABQYHMLESAHSWPHSLFNVASNYSQSFGDNNGLNPHGGFGG 433	Oy 276	RESULT 5 US-08-441-139-9 US-08-41-139-9 US-08-41-139-9 US-08-41-139-9 US-08-41-139-9 US-08-41-139-9 US-08-41-139-9 US-08-41-139-9 US-08-41-139-9 US-08-41-139-9 US-08-10-10-10-10-10-10-10-10-10-10-10-10-10-		OY 2 ATSLEPASTOONSVCNEWDLLRATRILVNNSSGEIRFEFLKSRGREGGSKTGGGKK 56 11 1:
118 SLGSRRITGGCVGSQVMIDPVISPWGFVFFSSTFHPLSSISNPQMFNASSNNRCDFCFK 177	178 KKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQ	1346 AYQAPSDINGWAGINGGINBERSQUSPHIFIG	TY 2.5 SASSITIANTERNETARE TO STREET TO STATE TO STREET T)y 298 SINGECSPNIID 309	ob 1422 SGLSSMGPBGVN 1433	SEGURATION OF A PARTICLE AND A PAPELLAND OF A SECURITY OF	Matches 70; Conservative 38; Mismatches 83; Indels 130; Ga	1 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1:

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                                                                                                                                                                                                  99 ATRLPVPVDPGVVLQ---GFPSSLGSNRI--YCGGVGSGQV--MIDPV-----ISPWGF 145
                                                                                                                                                                                                                                                                                                                                                                                             198 KYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIA-----RAASVSASSTTINPYFNE 250
                                                                                                                                                                                                                                                                                                                                                                                                                              305 TY-----LNNYRP------DSPSLKFEYDXSTSTTTPTTYRDASIAQLFYTANKY-HD 350
                                                                                                                                                 138 GKIPGPLTKRDEKDPVDALKDTVDVLSL-PVEADKAKAEKKSKNHYTF--TGTKGTVSKP 194
                                                                                                                                                                                                                                               195 BAKLITYLVDENKELKLTWRVETDIVDNWLLTYVNAAKTDEVVGVVDYVNEATYKVYPWGV 254
                                                                                                                                                                                                                                                                                               146 VETSSTTHELSSISNPQMFNAS-----SNNRCDTCFKKKRLDGDQNNVVRSNGGGPS 197
                                                                                                                                                                                                                                                                                                                                            255 NDPSKGSR--STVENPWNLAASEFTWLSDGSNNYTTT-----RGNNGIAQVNPSGGS 304
                                                        Gaps
                                                                                                    44 GRKPGSKTGQQKQK ----KPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNN 98
                                                    62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Shuster, Joffrey R.
APPLICANT: Medden, Mark
APPLICANT: Moyer, Dona L.
APPLICANT: Publisher, Class
APPLICANT: Publisher, Swen Brailorencesse HAVING INCREASED
TITLE OF INDRITION: ACTIVITY:
TITLE OF INDRITION: ACTIVITY:
TITLE OF INDRITION: ACTIVITY:
TITLE OF INDRITION: ACTIVITY:
   Query March 53%; Score 86; DB 1; Length 632; Best Local Similarity 22.9%; Pred. No. 2.6; Metches 61; Conservative 39; Mismatches 104; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4180.010-US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          251 ATNHTGPMEEFGSYMEGNPRNGSGGV 276
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FILING DATE: 17-MAY-1995
CLASSIFICATION: 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       351 LLYLLGFTEQAGNFOTNN--NGOGGV 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 4, Application US/08442859
; Patent No. 5807729
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IBM PC compatible
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TELEPHONE: 212-867-0123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Agris Dr., Cheryl H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03=MAR-1995
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SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 252
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER:
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STRANDEDNESS: sin
TOPOLOGY: linear
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                                                                                             97 NNATRLP-----VPVDPGVVLQGFPSSLG------SNRIYCGGVGSGQVMIDPVI 140
                                                                                                                                                                                              141 S--PWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKRLDGDQNNVVRSNGGGFSK 198
                                                                                                                                                                                                                                           661 ------NEYLDQKNPQKEKPSFQPLPLTAESLEYRRNFTDTNEYNIFAISELGWV 709
                                                                                                                                                                                                                                                                                                                                                                                                                           513 NDDVEVEGQSLLLVEEBEINDKYKPLYAGHVVAVLDRIPGQLFSGTLGLLRPSQQANSDN 572
                                                                                                                                              573 NKPPQSPKIAWFKPTDKKVPLIAIPTELAPKDFVENADKYSEKLFVASIKRW-----PIT 627
                                                                                                                                                                                                                                                                                            199 YTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSASSTTINPYFNEATHHTGPM 258
                                                                                                                                                                                                                                                                                                                                                                                         259 EEF----- 276
   ---QLAAATVG---DTSSVASIS 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Fuglsang, Claus
APPLICANT: Branner, Sven
TITLE OF INVENTION: NOVEL METALLOPROTEASE HAVING INCREASED
TITLE OF INVENTION: ACTIVITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    770 DELSLAPGRESATLSVYTLDSSTLRIKSTWVGESTISPSNI-LSLE 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   277 KEYEFFPGKYGERVSVVAT----TSSLVGD--CSPNTIDLSLK 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPRARIMG SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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APPLICATION NUMBER: US 08/398,489
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FILING DATE: 17-MAY-1995
59 ---PTLRGMGVAKLERQRIEEEKK----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 4, Application US/08443104
Patent No. 5691162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Shuster, Jeffrey R. APPLICANT: Madden, Mark APPLICANT: Moyer, Donna L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: AGTIS DT., Cheryl H.
REGISTRATION NUMBER: 34.086
REFERENCE/DOCKET NUMBER: 418
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-867-0123
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 03-MAR-1995
ATTORNEY/AGENT INFORMATION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: profein
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CORRESPONDENCE ADDRESS:
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APPLICANT: Shuster
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New York
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
US-08-443-104-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
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198 KYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIA-----RAASVSASSTTINPYFNE 250
                                                     99 ATRLPVPVDPGVVLQ---GFPSSLGSNRI--YCGGVGSGQV--MIDPV-----ISPWGF 145
                                                                                                                                           146 VETSSTTHELSSISNPQMFNAS-----SNNRCDTCFKKKRLDGDQNNVVRSNGGGFS 197
                                                                                                                                                                                                                                                                                                                                               305 TY-----LNNYRP------DSPSLKFEYDYSTSTTTPTTYRDASIAQLFYTANKY-HD 350
                                                                                                                                                                                                                                                  255 NDPSKGSR--STVENPWNLAASEFTWLSDGSNNYTTT-----RGNNGIAQVNPSGCS 304
                         44 GRKPGSKTGQQKQK-----KPTLRGMGVAKLERQRIBEEKKQLAAATVGDTSSVASISNN 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NOVEL METALLOPROTEASE HAVING INCREASED TITLE OF INVENTION: ACTIVITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Novo Nordisk of North America, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              405 Lexington Avenue, 64th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 86;
Pred. No. 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: AGIS Dr., Cheryl H.
REGISTRATION NUMBER: 34.06
REFERENCE/POCKET NUMBER: 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-MARCH-1995
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INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 04-MAY-1994
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             212-867-0123
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 10174-6401
COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     single
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
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Best Local Similarity
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STATE: New York
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CLASSIFICATION:
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PCT-US95-05534-4
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                                                                                                                                                                                                                                                                                                                                                                        198 KYTMIPPPMNGYDOYLLOSDHHORSOGFLYDHRIA-----RAASVSASSTIINPYFNE 250
                                                                                                                                                                                                                                                                                                                                                                                                            305 TY-----LNNYRP------DSPSLKFEYDISTTTPTTYRDASIAQLFYTANKY-HD 350
                                                                                                                                                                                      99 ATRLPVPVDPGVVLQ---GFPSSLGSNRI--YCGGVGSGQV--MIDPV----ISPWGF 145
                                                                                                                                                                                                                                 195 EAKLIYLVDENKELKLIWRVETDIVDNWLLTYVNAAKTDEVVGVVDYVNEATYKVYPWGV 254
                                                                                                                                                                                                                                                                           146 VETSSTTHELSSISNPOMFNAS-----SNNRCDTCFKKKRLDGDQNNVVRSNGGGFS 197
                                                                                                                                                                                                                                                                                                                          255 NDPSKGSR--STVENPWNLAASEFTWLSDGSNNYTTT-----RGNNGIAQVNPSGGS 304
                                                                                                                                       138 GKIPGPLTKRDEKDPVDALKDTVDVLSL-PVEADKAKAEKKSKNHYTF--TGTKGTVSKP 194
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                                                                                         44 GRKPGSKTGOOKOK ----KPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNN 98
                                              62;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Shaster, Jeffrey R.
APPLICANT: Madden, Mark
APPLICANT: Moyer, Donna L.
APPLICANT: Moyer, Donna L.
APPLICANT: Seplisang, Claus
APPLICANT: Branner, Sven
APPLICANT: Branner, Sven
TILL OF INVERTION: NOVEL METALLO
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Query Match 5.3%; Score 86; DB 1; Length 632; Best Local Similarity 22.9%; Pred. No. 2.6;
                                              39; Mismatches 104; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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APTOREN AGENT INFORMATION:
NAME AGTIS DIC CHETY! H
ANGESTRATION NUMBER: 43,086
REFRENCE/DOCKET WINBER: 4180.010-US
TELEPHONE: 212-867-0123
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FILING DATE: 03-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  251 ATNHIGPMEEFGSYMEGNPRNGSGGV 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                351 LLYLLGFTEQAGNFQTNN--NGQGGV 374
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Patent No. 5843753
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INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 632 amino acids
                                              61; Conservative
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MEDIUM TYPE: Tape
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CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 58437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
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STATE: New York
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                                                  Matches
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Length 632;

DB 5;

us-09-701-023-4.rai

Page 6

Mē	Matches	61; Conservative 39;	Mismatches 104; Indels 62; Gaps 15;	ER APPLICATION NUMBE
٥	44	GRKPGSKTGOOKQKKPTLRGM	KPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNN 98	: EARLIER FILING DATE: 1997-05-23 : EARLIER APPLICATION NUMBER: 60/047.587
q	138	: : :: : : :	:	
è	9	-AGGIMAGGSSASSAAIGNSSISSGASGIMASGAAAARIRIK	NDIVOCOCOCONNACOTA	FILING DATE: 1997-0
i á	201	COCCOLLO DE LA COLLO DEL LA COLLO DE LA CO		FILING DATE: 1997-0
3 ,		ONEL LEVE BUNE BALLINA VELLI VE	INTELLIVERANTEEVOVVEIVERALIENIEMSV 254	; EARLIER FILING DATE: 1997-05-23
δ	146	146 VETSSTTHELSSISNPOMFNAS	SNNRCDTCFKKKRLDGDQNNVVRSNGGGFS 197	; EARLIER APPLICATION NUMBER: 60/047,582 ; FARLIER PILING DATE: 1997-05-23
đ	255	255 NDPSKGSRSTVENPWNLAASEFTWLSDGSNNYTTT	LSDGSNNYTTTRGNNGIAQVNPSGGS 304	
δŏ	198	198 KYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIA	GFLYDHRIARAASVSASSTTINPYFNE 250	APPLICATION N
QC	305	TYDSPSD	DSPSLKFEYDYSTSTTTPTTYRDASIAQLFYTANKY-HD 350	; EARLIER FILING DATE: 1997-05-23 ; EARLIER APPLICATION NUMBER: 60/047,632
ò	251	251 ATNHIGPMEEFGSYMEGNPRNGSGGV 276	276	FILING DATE: 1997-05
i á				FILING DATE: 1997-0
3	Toe	LI LIGHTEQUENTUTNN NGOGGV	n/ n	
RESU	RESULT 10			; EARLIER APPLICATION NUMBER: 60/043,568 ; EARLIER FILING DATE: 1997-04-11
)-SD	US-09-149-476-371	76-371 371. Application US/091492	476	
	tent h	Patent No. 6420526		
5 .	DELICA	GENERAL INFORMATION: APPLICANT: Rosen of al		; EARLIER FILING DATE: 1997-04-11
	ITLE C	TITLE OF INVENTION: 186 Human Secreted proteins	reted proteins	FILING DATE: 1997-0
	TLE RE	FILE REFERENCE: PZ002P1 CHRRENT APDLICATION NIMBER: HS /09/149 476	110 476	APPLICATION !
	CURRENT	FILING DATE: 1998-09-08	0/1/617/	: EARLIER FILTING DATE: 1997-04-11
	EARLIER	APPLICATION NUMBER: PCT/US	PCT/US98/04493	FILING DATE: 1997-0.
	EARLIER	Filing DATE: 1998-03-06 APPLICATION NUMBER: 60/040,162	0,162	: EARLIER APPLICATION NUMBER: 60/043,669
ш.	ARLIEF	TILING DATE: 1997-0.		: EARLIER APPLICATION NUMBER: 60/043,312
	ARLIER ARLIER	APPLICATION NUMBER: 60/040,333 FILING DATE: 1997-03-07	0,333	; EARLIER FILING DATE: 1997-04-11 : FARLIER ADDLICATION MIMBER: 60/043 313
ш.	ARLIEF	APPLICATION NUMBER: 60/038,621	8,621	; EARLIER FILING DATE: 1997-04-11
	EARLIER F	FILING DATE: 1997-03-07 APPLICATION NUMBER: 60/040,626	0,626	; EARLIER APPLICATION NOMBER: 60/043,672 . FARLIER FILING DATE: 1997-04-11
es [ARLIER	TLING DATE: 1997-0:		K I
	ARLIER	AFFLICATION NUMBER: 50/040,334 FILING DATE: 1997-03-07	0,354	; EARLIER FILING DATE: 1997-64-11 : FARLIER APPLICATION NIMBER: 60/048-974
. ··	EARLIER	APPLICATION NUMBER: 60/040,336	0,336	FILING DATE: 1997-0
	ARLIER	FILING DATE: 1997-03-07 APPLICATION NUMBER: 60/040.163	0.163	; EARLIER APPLICATION NUMBER: 60/056,886
2	EARLIER	FILING DATE: 1997-03-07		
4 E	ARLIER ARLIER	APPLICATION NUMBER: 60/047,600 FILING DATE: 1997-05-23	7,600	; EARLIER FILING DATE: 1997-08-22
i fat	ARLIER	APPLICATION NUMBER: 60/047,615	7,615	FILING DATE: 1997-00
	EARLIER FARLIER	FILING DATE: 1997-05-23		: EARLIER APPLICATION NUMBER: 60/056,893
	ARLIER	FILING DATE: 1997-05-23		; EARLIER FILING DATE: 1997-08-22 ; EARLIER APPLICATION NUMBER: 60/056,630
	ARLIER	APPLICATION NUMBER: 60/047,502	7,502	FILING DATE: 1997-08
а <u>Б</u>	EARLIER		7,633	: EARLIER APPLICATION NUMBER: 60/056,878
.,	ARLIER	FILING DATE: 1997-05-23		
	EARLIER EARLIER	APPLICATION NUMBER: 60/047,583 FILING DATE: 1997-05-23	7,583	; EARLIER FILLING DATE: 1997-08-22 • RARLIER ADDITCATION NUMBED: 60.056 972
M 	EARLIER	APPLICATION NUMBER: 60/047,617	7,617	
	EARLIER FAPLIER	FILING DATE: 1997-05-23 APPLICATION NUMBER: 60/047 618	618	; EARLIER APPLICATION NUMBER: 60/056,882
ı ші 	ARLIER	FILING DATE: 1997-05-23		APPLICATION N
	ARLIER	夏1	7,503	FILING DATE: 1997-08
	EARLIER	72	7,592	; EARLIER APPLICATION NUMBER: 60/056,903 ; EARLIER FILING DATE: 1997-08-22
	EARLIER	FILING DATE: 1997-05-23	9	APPLICATION N
a pi	EARLIER	FILING DATE: 1997-05-23	196'/	: EARLIER FILING DATE: 1997-08-22 : EARLIER APPLICATION NUMBER: 60/056,879
	EARLIER	APPLICATION NUMBER: 60/047,584 FILING DATE: 1997-05-23	7,584	; EARLIER FILING DATE: 1997-08-22 FARITER APPITCATION NIMBER 60/056 880

us-09-701-023-4.raı

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49 SKTGQQKQKKPTLRGMGVAKLERQRIEEEKKQLAA----ATVGDTSSVASISNNATRLPV 104
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     166 ASSNNRCDICFKKKRLDGDQNNVVRSNGGGF 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240 QSNNGRYDDCKEFKDLHCSKDSTLAEEESEF 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/071,035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: PB369P2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: A. Anders Brookes
REGISTRATION NUMBER: 36,373
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TELEPHONE: (301) 309-8504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (301) 309-8504
TELEFAX: (301) 309-8512
INFORMATION FOR SEQ ID NO: 484
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MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
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MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Rockville
STATE: Maryland
COUNTRY: USA
ZIP: 20850
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BARLIER PILING DATE: 1997-106-23
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Sequence 484, Application US/09071035
Parent No. 644, Application US/09071035
Parent No. 644, Application US/09071035
PARENT. INFORMATION:
RPILICANT GOTOR TO THE OF THE O ŝ 53 QQKQKKPTLRGMGVAKLERQRIEEEKKQLAAATVGDTS-----SVASISNNATRLPVP 105 138 QEAKERKTKDDEGATPIKRRRVSSDEEHTVDSCISDMKTETREVLTPTSTSDNETRDSSI 197 106 VDPGVVLQGFPSSLGSNRIYCGGVGSQQVMIDPVISPWGFVETSSTTHELSSISNPQMFN 165 Query Match 5.2%; Score 85.5; DB 4; Length 349; Best Local Similarity 19.9%; Pred. no. 1.2; Matches 30; Conservative 30; Mismatches 66; Indels 2; WEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage COMPUTER: HP Vectra 486/33 OPERATING SYSTEM: MSDOS version 6.2 BALIER APPLICATION NUMBER: 60,057,669
EARLIER FILING DAFE: 1997-09-05
EARLIER FILING DAFE: 1997-06-10
EARLIER FILING DAFE: 1997-06-13
EARLIER FILING DAFE: 1997-06-13
EARLIER FILING DAFE: 1997-10-02

j.

63; Gaps

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DD 186 SKAGLEKOKRAABEREQARLABEQARABEKAKQAAAKPAKAEVKAEBPWASSSTTEAQAPA 245	QY 165 NASSNNRCDTCFKKKRLDGDQNNVVRSNCGGFSKYTMIPPPMGYDQYLLQSDHHQR 221
2) LOJ FVDFOV LIGGEFSOLGSURATIOGGOGGGWALDFYLSFNOFFELSSLINELSSLONEWERF 104 11 - 11 - 11 - 11 - 11 - 11 - 11 - 11	Db 295 NSATENTGSSSSEQPYQPTTPSDNGNNGGQTGGGTYTPTPEPTPAPSADPTINALNVLRQ 354
165 NASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTM:	QY 222 SQGEUNDHRIARAASYGASSTTINPIPNEATUHIGEBEGS
Db 268 NSATENTGSSSSEQPVQPTTPSDNGNNGGQTGGGTVTPTPEPTPAPSADPTINALNVLRQ 327	Oy 268 NPRNGSG-GVKEYEPFPGKYGERVSVVATTSSLVG 301
2y 22 SGG*LYDERIJRAANSKSTTINPYTHRYTHETPERETGSWDD 267 1111	414
Dy 268 NPRNGSG-GWEYEPPGKYGEKVSVVATTSSING 301	RESULT 13 US-08-08-08-50 A-16 US-08-08-08-08-16
SO, NWALASGOGHKUMALINFOL "TRVORGISGOSILVO 419	
285-09-071-035-482 Sequence 482, Application US/09071035 Income was 64.48042	TITLE OF INVENTION: And Compositions Based On No. 5785158ch Proteins And
GENERAL INFORMATION: APPLICANT: Gil H. Choi	ILLE OF TWENTION MULTEL ACIDS HUMBER OF SEQUENCES: 21 CORRESPONDENCE ADDRESS:
ITITE OF INVENTION: Enterococcus faecalis Polynucleotides and Polypeptides NUMBER OF SEQUENCES: 496	ADDRESSEE: Pennie & Edmonds ; STREET: 1155 Avenue of the Americas
ADMESSEE: Hand Genome Sciences, Inc. STREET: 9410 Key West Avenue	STATE: New YORK COUNTRY: U.S.A.
	; ZIP: 10036 ; COMPUTER READABLE FORM:
ZODNIRY: USA ZIP: 2.085A	MEDIUM TYPE: Floppy disk COMPUTER: IM PC compatible
MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage	SOFTWARE: Patentin Release #1.0, Version #1.25
CUMPUTER: HP Vectra 486,43 OPERATING SYSTEM: MSDG version 6.2 COPEMAND: ACTIT MOUS	CURRENT APPLICATION DATA: APPLICATION DATA: CTT 142 APPLICATION DATA: CTT 142 APPLICATION DATA: CTT 142 APPLICATION DATA: CTT 144 APPLICATION DATA: CTT 144 APPLICATION DATA:
CURRENT APPLICATION DATA: APPLICATION NUMBER: 15.709.7071.035	CLAING DAIL: 22 JON 1292 CLASTRICATION 435
FILING DATE: CLASSIFICATION:	NAME: MAYOCK, S. Leslie REGISTRATION NUMBER: 18,872
PRIOR APPLICATION DATA: APPLICATION NUMBER:	: REFERENCE/DOCKET NUMBER: 7326-015 ; TELECOMMUNICATION INFORMATION:
FILING DATE: ATTORING AGENT INFORMATION:	TELEPHONE: 212 /90-9090 TELEPHONE: 212 869864/9741
NAME: A. ALUGES, BLOOKES REGISTRATION WUMBER: 36,373 REFERENCE/DOCKET NUMBER: PB369P2	; INTORARTION POR SED ID NO: 16: ; SEQUENCE CHARACTERISTICS:
TELECOMMUNICATION INFORMATION: TELEPHONE: (301) 309.8504	; LENGTH: 654 amino acids ; TYPE: amino acid
NTELENAY (0.401) 309-8512 SEQUENCE CHARACTERISTICS:	: STRANDERESS: SINGLE ; TOPOLOGY: unknown ; MOLECULE TYPE: peptide
LENGTH: 449 amino acids TYPE: amino acid combanantes. sind	
STANDARD STA	
	QY 46 KPGSKTGQQQQQKRPTLAGAGVAKLERQRIEEERKQLAAATVQDTSSVASIS
	CY 97 NNATRLPVPVDPGVVLQGFPSSLGSNRIYCGGVGSGQVMIDPV 139
3y 49 SKTGQQKQKKPPLRGMGVAKLERQRIEEEKKQLAAATVGDTSSYASISNNATRLPV 104 11 :	348 GYLSDVSSPPLMTSPFQQSPSMPLNHLTSM
105 PVDPGVVLQGPPSSLGSNRIYCGGVGSGVMIDPVISPMGFVETSSTTHELSSISNPQMF 164	140
273SSSSATESSTQQTTETTTPSTD 294	Db 408 VPRLTHLMASSPNTIMSMGSMHFTVGGAPTMNSQCDWLARLQNGWVQNQYDP 459

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Artevanis-Taskonss, S. ed. Rethods
WENTION: Therpeutic And Disgnostic Methods
WENTION: And Compositions Based On No. 6083904ch Proteins And
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97 ---NNATRLPVPVDPGVVLQGFP----SSLGSNRIYCG----GVGSGQVMIDPV 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    348 GYLSDVSSPPLMTSPFQQSPSMPLNHLTSMPESQLGMNHINMATKQEMAAGSNRMAFDAM 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140 ISPWGFVETSSTTHELSSISNPQMFNAS------SNNRCDTCFK-----KKRLDG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    408 V-----PRLTHLNASSPNTIMSNGSMHPTVGGAPTMNSQCDWLARLQNGMVQNQYDP 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460 IRNGIQQGNAQQAQALQHGLMTSLHNGLPATTLSQMMTYQAMPNTRLANQPHLMQAQQMQ 519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46 KPGSKTGQQKQKKPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASIS------
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
MCDUM TYPE: Floppy disk
COMPUTER: HP COMPATELLIA
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION FELENCE
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40; Mismatches 103;
                                                                                                                        520 QQONLQLHQSMQQQHHNSSTTSTHINSPF 548
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: Pennie & Edmonds
1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "ALING DATE: 12-1001-1993 ATTORNY ARBY INCORATION: TO-1001-1993 ATTORNY ARBY INCORATION: TO-1001-1993 ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY ATTORNY 
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                                                                                                                                                                                                                                    RESULT 18. SESULT 16. SESULT 18. SESULT 18. OS 08 5 3 2 3 8 4 16. Sequence 16. Application US/08 5 3 3 3 8 4 16. SERBAL INCORMATION:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 212 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 212 869864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity 18.6%
Matches 50; Conservative
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TITLE OF INVENTION: And
TITLE OF INVENTION: Nucl
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
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MOLECULE TYPE: peptide
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: New York
RY: U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-532-384-16
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
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STATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    *** AFPITCANT: Attravais-Textwones, Sprindon ea. 1
TITLE OF INVENTION: Human No. 5556414th And Debts. Binding Domains
TITLE OF INVENTION: In Toporythmic Proteins, and Methods Based Thereon
NUMBER OF SEQUENCES: 37
CORRESPONDENT SADRESS
ADDRESSE: Pennie & Edmonds
CITY: New York
STREET: 1155 Avenue of the Americas
CITY: New York
CONTRIS New York
CONTRIS New York
CONTRIS New York
      -----GGFSKYTMIPPPMNGYDQYLLQSDHHQ 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  408 V-----PRLTHLNASSPNTIMSNGSMHFTVGGAPTMNSQCDWLARLONGMVONOYDP 459
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                                                                        460 IRNGIQQGNAQQAQALQHGLMTSLHNGLPATTLSQMMTYQAMPNTRLANOPHLMQAQQMQ 519
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICARION DATA: 05/08/346,128
                                                                                                                                                      221 RSQGF-LYDHRIARASVSASSTTINPYF 248
                                                                                                                                                                                                                                    520 OCCULCINOSMOCOHNISSTISTHINSPF 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 7326-009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 530
PRIZE RAPLICATION DAY
PAPLICATION NUMBER: 07/879,038
PILING DATE: 30-APR-1992
ATTORNEY/AGENT INFORMATION:
NAME: MISTOCK, S. Leslie
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 35, Application US/08346128
Patent No. 5856441
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Misrock, S. Leslie
REGISTRATION NUMBER: 18,872
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TELEPHONE: 212 790-9090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 212 8698864/9741
TELEX: 66141 PENTIE
INFORMATION FOR SEQ ID NO: 35:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy
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MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
184 DONNVARSNG--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10036
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---GGFSKYTMIPPPMNGYDQYLLQSDHUQ 220

221 RSOGF-LYDHRIARASVSASSTTINPYF 248 us-09-701-023-4.raı

Mon Jan 27 14:05:57 2003

Db 520 QQQULQLHQSMQQQHHNSSTTSTHINSPF 548

Search completed: January 26, 2003, 00:07:17 Job time : 28 secs

GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.

protein search, using sw model ì M protein

January 26, 2003, 00:04:22 ; Search time 18 Seconds

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(without alignments) 352.004 Million cell updates/sec

.....TISSLVGDCSPNTIDLSLKL 314 US-09-701-023-4 1634 1 MATSLFFMSTDQNSVGNPND. Mitle:

Gapop 10.0 , Gapext 0.5 scoring table:

sequence:

otal number of hits satisfying chosen parameters: 122226 segs, 20178551 residues

searched:

seg length: 0 seg length: 2000000000 ost-processing: finimum DB faximum DB

Minimum Match 0% Maximum Match 100% Listing first 45 summaries

atabase

Sequence 302, Application US/09801368 Patent No. US20020128250A1

APPLICANT: Busby, Robert APPLICANT: Cali, Brian APPLICANT: Hecht, Peter

GENERAL INFORMATION: US-09-801-368-302

Holtzman, Doug Madden, Kevin Maxon, Mary Milne, Todd

APPLICANT: APPLICANT: APPLICANT: APPLICANT:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

18:-99 8011.368-302 18:-99 801.368-304 18:-90 807.368-304 18:-90 807.268-30 18:-99 807.218-109 18:-99 801.368-100 18:-90 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 18:-99 801.368-304 Length Query Match 1 Score esult No.

APPLICAMY NO. US20020120250Alman, Thea APPLICAMY NO. US20020120250Alman, Thea APPLICAMY SPEECH STATEMENT Repet Science APPLICAMY Sherman, Sofit APPLICAMY Sherman, Sofit APPLICAMY Sherman, Sofit APPLICAMY Sherman, Sofit APPLICAMY Sherman, Sofit APPLICAMY Sherman, Sofit Sherman, Sherman ORGANISM: Saccharomyces cerevisiae US-09-801-368-302 SEQ ID NO 302 TYPE: PRT sequence 100 App sequence 130, App sequence 36, App sequence 31, App Sequence 31, App Sequence 310, App Sequence 310, App Sequence 1863, Ap Sequence 1863, Ap Sequence 302, App Sequence 294, App Sequence 577, App Sequence 2, Appli Sequence 9, Appli Description

Gaps 53; Length 676; Indels 6.1%; Score 99.5; DB 10; 22.7%; Pred. No. 0.22; tive 31; Mismatches 90; Conservative Best Local Similarity Matches 51; Conserv Query Match

10;

37 TETLKSRGRKPGSKTGQQKQKKPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASIS 96 ò qq

> Sequence Sequence

rage 1

Sequence 4, Appl

Sequence 2, Appl 18 Sequence 24, Appl 18 Sequence 24, Appl 18 Sequence 559, Appl 18 Sequence 1309, Appl 18 Sequence 1309, Appl 18 Sequence 137, Appl 18 Sequence 137, Appl 18 Sequence 137, Appl 18 Sequence 137, Appl 18 Sequence 136, Appl 18

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81.5 81.5 81.5 81.5

Sequence 25, Appl Sequence 30, Appl Sequence 43043, A Sequence 5, Appli

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Sequence 2, Appli Sequence 20, Appl Sequence 16, Appl Sequence 24, Appl

80.5 80.5 80.5 79.5 79.5 79.5 79.5

Sequence 5, Appli Sequence 5, Appli Sequence 579, Ap Sequence 3, Appli Sequence 2, Appli

US-09-836-470B-3 US-09-902-772-2

TO 0.2 10 TO 7.2 4 TO 0.7

Mon Jan 27 14:06:00 2003

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1127 HMYQNEQDNV------DKHT---EQQESLEQKLFQLESKNRWLRQQLVYAHK----K 1170
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 74 -----IEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIYCG 127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19 NDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPTLRG---MGVAKLERQR-- 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1239;
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TITILE OF INVENTION: Transcriptional Intermediary Factor-2
NUMBER OF SEQUENCES: 14
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STREET: 1100 New York Avenue, NW. Sulte 600
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY TITLE OF INVENTION: AND DIAGNOSIS OF BREAST CANCER FILE REPRENCE: 210121.470610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46; Mismatches 128;
466 NTAGGVFNRQSQYAMPHY --- PSVRAAPSYSSGCS 498
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31.4%; Pred. No. 2.5;
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SEQ ID NO 577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/007,805
                                                                                                                  Sequence 577, Application US/10007805
Patent No. US20020150581A1
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Voegel, Johannes
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Patent No. US20020106727A1
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                                                                                                                                                                                            Jiang, Yuqiu
Dillon, Davin C.
Mitcham, Jennifer L.
                                                                                                                                                                                                                                                                                                                                                              Fanger, Gary R.
Vedvick, Thomas S.
McNeill, Patricia D.
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                                                                                                                                                                                                                                                                                                                                        Henderson, Robert A.
                                                                                                                                                                                                                                                                                        Harlocker, Susan L.
Hepler, William T.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Durham, Margarite
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                                                                                                                                                                                                                                                              Xu, Jiangchun
Harlocker, Sus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
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NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
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                                                                                                                                                                      GENERAL INFORMATION:
                                                                                            US-10-007-805-577
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APPLICANT:
APPLICANT:
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FILE REFERENCE: 109272.147
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                                                                                                                                            559 NSSNISSTNNTNNNNNNNNNSSNNNSNNSNNSNNSNNSYYSNNE--DAPVNGAAISE 616
97 NNATRLPVPVDPGVVLQGFPS-SLGSNRIYCGGVGSGQVMIDPVISPWGF--VETSSTTH 153
                                            526 M-----NPGTFPPVQTAVNG 558
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                                                                                               154 ELSSISNPQMFNASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNG--YDQ
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                                                                                                                                                                                                                                                                                                                                                          Sequence 294, Application US/09801368
Patent No. US20020128250A1
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Best Local Similarity 21.4%
Matches 72; Conservative
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Holtzman, Doug
Madden, Kevin
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Sherman, Amir
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APPLICANT: Cali, Brian
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Milne, Todd
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US-09-801-368-294
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167 SSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGY-----DQYLLQSDHHQ 220
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                                                                                                                                                                                                                                                                                                                                                                                                              518 KSATTIDERPSDFIRLNSEESVGISSLRTSQTISTIVSNDSSSTASIPSQISRIS---QV 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                               109 GVVLOGFPSSLGSN--RIYCGGVGSGQVMIDDVISPWGFVETSSTTHELSSISNPQMFNA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                575 NSLINDYNYNRQSHITRVYSGTDDGSSVSI-----FEDTSSSTKQ-----KIFDQ 619
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                                                                                                                                                                                                                                                                                                            461 ANPVYNRSSSQTSKGYNSSDYDLERTHSLDENVNSPTSISSPSSKS---SPFTKTTSKDT 517
                                                                                                                                                                                                                                                                                                                                                                     57 KKPTLRGMGVAKLERQRIEEE-----KKQLAAATV--GDTSSVASISNNATRLPVPVDP 108
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                                                                                                                                                                                                                                                                   2 ATSLFFMSTDQNSVG---NPNDILRNTRL--VVNSSGEIRTETLKSRGRKPGSKTGQQKQ 56
                                                                                                                                                                 Length 742;
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                                                                                                                                                                 DB 10;
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                                                                                                                                                                                               Pred. No. 2;
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                                                                                                                                                                     5.5%; Score 90;
22.7%; Pred. No.
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No. US20020128250Alman, Thea
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PRIOR APPLICATION NUMBER: 08 09/487,558
PRIOR FILING DATE: 2000-01-19
PRIOR PELIANO DATE: 1999-10-20
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Patent No. US20020128250A1
                                                                                                 ; ORGANISM: Schizosaccharomyces pombe
US-09-732-180-9
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US-09-801-368-100
                                                                                                                                                                                                                      Conservative
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Silva, Jeff
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APPLICANT: Busby, Robert
APPLICANT: Cali, Brian
APPLICANT: Hecht, Peter
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Patentin Ver.
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                                                                                                                                                                                        Best Local Similarity
Matches 62; Conserv
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SOFTWARE: Pate
SEQ ID NO 9
LENGTH: 742
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        118 SLGSNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFK 177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.6%; Score 92; DB 10; Length 1464; 17,9%; Pred. No. 3.5;
                                                COMPUTER READLES FORM:
MEDINY TYPE: Floppy disk
COMPUTER: ISH PC COMPATION
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTAMES: Pc-DOS/MS-DOS
SOFTAMES: Pc-DOS/MS-DOS
CURRENT APPLICATION PARA:
                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 1383.0130001/EKS TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                               APPLICATION NUMBER: US/09/842,256
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CURRENT PILING DATE: 2000-12-07
PRIOR APPLICATION NUMBER: US 60/169,699
PRIOR FILING DATE: 1999-12-07
                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 08/891,640
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S-09-842-256-2
                                                                                                                                                                                                                                                                                                                    FILING DATE: <Unknown>
ATTORNEY/AGEWT INDORANTION:
NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36,688
                                                                                                                                                                                                                      FILING DATE: 26-Apr-2001
CLASSIFICATION: <Unknown>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Robert A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: DYOU25.001AUS
                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           56; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
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APPLICANT: Nern, Peter MA
                          ZIP: 20005-3934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1422 SGLSSMGPEQVN 1433
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         298 SLVGDCSPNTID 309
       COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
IS-09-732-180-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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12;

84:

Indels

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TITLE OF INVENTION: Methods for Improving Secondary Metabolite Production in Fungi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 5.4%; Score 88.5; DB 10; Length 517; Best Local Similarity 20.5%; Parcel No 1.17; Matches 76; Conservative 43; Mismatches 110; Indels 141;
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4 Page

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TITLE OF INVENTION: Methods for Improving Secondary Metabolite Production in Fu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              513 NDDVEVEGOSLILVEREELINDKYKPLYAGHVVAVLDRIPGOLFSGTLGLLRPSOOANSDN 572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97 NNATRLP-----VPVDPGVVLQGFPSSLG------SNRIYCGGVGSGQVMIDPVI 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 573 NKPPOSPKIAWFKPTDKKVPLIAIPTELAPKDFVENADKYSEKLFVASIKRW-----PIT 627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141 S--PWGFVETSSTTHELSSISNPQMFNASSNNRCDICFKKKRLDGDQNNVVRSNGGGFSK 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            628 SLHPFGIL----VSELGDIHDP-----DTEIDSILRDN--NFLS 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199 YTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSASSTTINPYFNEAINHTGPM 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661 -----NEYLDOKNPOKERPSFOPLPLTAESLEYRRNFTDTNEYNIFAISELGWV 709
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49; Mismatches 138; Indels 139; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       453 ATSNNFLSSPSSSDSLSKDDLSVRRKRSSTINNDSDSLSSPTKSGVRRRSSLKQRPTQKK 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 ATSLFFMSTDQNSVGNPNDLL---RNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKK 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 5.3%; Score 86.5; DB 10; Length 1250; Best Local Similarity 19.9%; Pred. No. 9.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    277 KEYEFFPGKYGERVSVVAT-----TSSLVGD--CSPNTIDLSLK 313
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/801,368 CURRENT FILING DATE: 2001-03-07
                                                                                                                                                                                                                                                                                                              No. US20020128250Alman, Thea Royer, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 09/467,558
PRIOR FILING DATE: 2000-01-19
PRIOR APPLICATION NUMBER: US 60/160,587
PRIOR FILING DATE: 1999-10-20
                          Sequence 364, Application US/09801368
Patent No. US20020128250A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 64, Application US/0988815; Patent No. US20020064856A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Saccharomyces cerevisiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patentin version 3.0
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                                                                                                                                                                                                   Holtzman, Doug
Mædden, Kevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: 109272.147
                                                                                                                                                                                                                                                                                                                                                                            Salama, Sofie
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                                                                                                                                                                                                                                                                                                                                                                                                           Sherman, Amir
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Summers, Eric
                                                                                                          APPLICANT: Busby, Robert
APPLICANT: Cali, Brian
APPLICANT: Hecht, Peter
                                                                                                                                                                                                                                                             Maxon, Mary
Milne, Todd
                                                                                                                                                                                                                                                                                                                                                                                                                                 Silva, Jeff
                                                                                        GENERAL INFORMATION:
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US-09-801-368-364
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140 ALYVAGEQAQASIADSTLQGAGGVRVERGANVTVQRSTIVDGGLHIGTLQPLQPEDLPPS 199 83 AATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRI-----YCGGVGSGQVMI 136 200 RVVLGDTS-----VTAVPASGAPAAV----SVFGANELTVDGGHITGGRAAGVAAM 246 137 D------PVISPWGFVETSSTTHEL--SSISNPQ 162 247 DGAIVHLQRATIRRGDAPAGGAVPGGFGFGFLLDGWYGVDVSDSTVDLAQSIVEAPQ 306 163 MFNASSNNR-CDICFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQR 221 307 LGAAIRAGRGARVTVSGGSLSAPHGNVIETGGGA----RRFPPPASPL-SITLQAGARAQ 361 ----GQQKQKK---PTLRGMGVAKLER--222 SOGFLY 227 52 g qq ö a ద à g ò à g ó g à q g ò ð ñ TITLE OF INVENTION: POLYEPTIONS CONTAINING PLANGEPHENSA COFFIRE REPEATED TITLE OF INVENTION: PRECIOUS OF PERFACTIN IN BIGGERELLA, PERFUSSIS, TITLE OF INVENTION: BONDELLA PARPETISSIS, AND BONDEFELLA, PERFUSSIS, TITLE OF INVENTION: BRONNHISEPTICA, PHEIR USE IN DIAMOSTICS, AND IN TITLE OF INVENTION: HOROCOBRIC COMPOSITIONS FILL OF A PARENT ON: INVENTION: DIAMOSTICS, AND INVENTION: DIAMOSTICS, AND INVENTION OF THE PRESENCE: 03495-0306-00000.

CURRENT PILING DATE: 2001-09-10. 3143 GEAKERKTKDDEGATPIKRRPVSSDEEHTVDSCISDMKTETREVLTPISTSDNETRDSSI 3202 3203 IDPGTE-ODLPSPENSS-----VKEYRMEVPSSFSEDMSNIRSOHABE 3244 53 QQKQKKPTLRGMGVAKLERQRIEEEKKQLAAATVGDTS-----SVASISNNATRLPVP 105 106 VDPGVVLQGFPSSLGSNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFN 165 Length 3353; Query Match 5.2%; Score 85; DB 9; Length 911; Best Local Similarity 19.9%; Pred. No. 8.3; Indels 5.2%; Score 85.5; DB 10; 19.9%; Pred. No. 50; tive 30; Mismatches 66; |:| | | | : | | ::: : | | | 3245 QSNNGRYDDCKEPKDLHCSKDSTLAEEESEF 3275 166 ASSNNRCDTCFKKKRLDGDQNNVVRSNGGGF 196 APPLICANT: SUDRARNAM, SUCHA.
TITLE OF INVENTION: NOVEL PROTEASES
FILE REVERENCE: 1036/02/1214 (1998), 615
CURRENT APPLICATION NUMBER: 105/04/988, 615
PRIOR APPLICATION NUMBER: 0001-06-26
PRIOR APPLICATION DATE: 2001-06-26 PRIOR APPLICATION NUMBER: 60/206,969 PRIOR FILING DATE: 2000-05-25 TYPE: PRT ORGANISM: Bordetella bronchiseptica : LOCATION: (1891) : OTHER INFORMATION: Any amino acid JS-09-888-615-64 Sequence 4, Application US/09855754 Publication No. US20020192237A1 GENERAL INFORMATION: APPLICANT: BOURSAUX-EUDE, CAROLINE GUISO-MACLOUF, NICOLE CAENEPEEL, SEAN CHARYDCZAK, GLEN MANNING, GERARD SOFTWARE: Patentin Ver. 2.1 Best Local Similarity 19.99 Matches 30; Conservative SOFTWARE: PatentIn Ver. 2.1 APPLICANT: PLOWMAN, GREGORY NUMBER OF SEQ ID NOS: 150 WHYTE, DAVID NUMBER OF SEQ ID NOS: 24 ORGANISM: Homo sapiens NAME/KEY: MOD_RES SEQ ID NO 64 LENGTH: 3353 SEQ ID NO 4 LENGTH: 911 JS-09-855-754-4 APPLICANT: APPLICANT: APPLICANT: TYPE: PRT **Ouery Match** APPLICANT

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-ORIEEEKKOLA 82

969 DYGFRLTT---APGNGLYVNYGLKALNIHGGOKLTLAEHGGAYGATADMSAKIGGEGDLA 1025 1026 INTVRQVSLSNGQNDYQGATYVQMGTLRTDADGALGNTRELNISNAAIVDLNGSTQTVET 1085 739 MGSSEVTIANPGTLDILAST----NSAGDYTLTNALKGDGLMRVQLSSSDKMFGFTHATG 794 795 TEFAGVAQLKDSTFTLERDNTAALTHAMLQSDSENTTSVKVGE-QSIGGLAMNGGTIIFD 853 100 TRLP-----VPVDPGVVLQGFPSSLGSNRIYCGGVGSGQVMIDDVISPWG--FVETS 149 854 TDIPAATLAEGYISVDTLVVGAGDYTWKGRNYQV---NGTGDVLID-VPKPWNDPMANNP 909 150 STT-----HELSSISNPOMFNASSNNRCDTCFKKRRLDGD--------ONNVVRSNG 193 910 LTTLNLLEHDDSHV-GVQLVKAQTVIGSGGSLTLRDLQGDEVEADKTLHIAQNGTVVAEG 968 99; Gaps 49 SK---TGQQKQKKPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNA----- 99 194 G-GFSKYTMIPPPMNG-YDQYLLQS-DHHQRSQGFLYDHRIARAASVSASS----TT 244 IN-----SGVKEYEF Length 1325; Indels APPLICANT: Oblish, Kari L.
APPLICANT: Sykkind, Judith W.
TITLE OF INVENTION: Genes identified as required for
TITLE OF INVENTION: proliferation of E. coli Query Match 5.2%; Score 84.5; DB 10; Best Local Similarity 2.2%; Pred. No. 16; Best Conservative 41; Mismatches 145; Marches 84; Conservative 41; Mismatches 145; 8 MSTDONSVGNPN--DLLRNTRLVVNSSGEIR-TETLKSRG-NUMBER OF SEQ ID NOS: 481 SOFTWARE: FastSEQ for Windows Version 4.0 FILE REPRENCE: BILTAN, 009A
CURRENT PALLAC BANGARATA
CURRENT FILING DATE: 02/09/741,669
CURRENT FILING DATE: 02/09/12-19
PRIOR PALLATION NUBBER: 02/09/173005
PRIOR PALLATION DATE: 1999-12-23 Sequence 304, Application US/09741669 Patent No. US20020022718A1 Forsyth, R. Allyn TYPE: PRT ORGANISM: Escherichia coli US-09-741-669-304 GENERAL INFORMATION: APPLICANT: Forsyth, 362 CRALLY 367 US-09-741-669-304 LENGTH: 1325 SOFTWARE: F2 SEQ ID NO 304

12;

98; Indels 116;

31; Mismatches

61; Conservative

83 NPAAELREQNGSVISSGQLFDEGVR---RFLGTVIVKAGKLVADHATLANVSDTRDDDGI 139

17 NPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKT----

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61 EDISKK-----EDTPKEV--ADVAEVQPKSSVTHNAETPKVRKARSVDEGSFDITRDSKN 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    114 VVESTPITI-QGKEHFEGYGS----VDIQKKPTDLGVSEVTRFNVGNESNGLIGALQLKN 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            169 KIDFSKDFNFKVRVANNHOSNTTGADGWGFLFSKGNAEEYLTNGGILGDKGLVNSGGFKI 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  222 SQGFLYDHRIARAASVSASSTTINPYFNEATNHTGPMEEFGSYMEGNPRNGSGGVKEYEF 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12 QNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKIGQQK------QKKPTLRG 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 ENNIENPITLKDNVQ-----SKEVKIEEVINKDIAPQGVEAKSEVISNKDIIEHEPSVKA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          171 RCDTC----FKKKRLDGDQNNVVRSNGGG--FSKYTMIPPPMNG---YDQYLLQSDHHQR 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ---YRGYGAFV----KNDSSGNSQ--- 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64 MGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNA----TRLPVPVDPGV-----
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                                                                                                                                                                                                   APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: Prokaryotes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 5.1%; Score 83.5; DB 10; Best Local Similarity 18.9%; Pred. No. 14; Matches 62; Conservative 58; Mismatches 135;
                                                                                                                                                                                                                                                                              FILE REFERENCE: ELITRA,0113,10000
CURRENT PRILATION NUMBERS US/09/815,242
CURRENT FILMS DATE: 2001-03-21
PRICAR PRILATION UNBERS: 60/191,078
PRIOR FILMS DATE: 2000-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING MATE: 2000-03-27.

PRIOR APPLICATION MURBER: 69/200, 848

PRIOR FILING MATE: 2000-05-32

PRIOR FILING DATE: 2000-05-36

PRIOR FILING DATE: 2000-10-32

PRIOR FILING DATE: 2000-11-32

PRIOR PILING DATE: 2000-11-32

PRIOR PILING DATE: 2000-11-32

PRIOR PILING DATE: 2000-11-37

PRIOR PILING DATE: 2000-11-37

PRIOR PILING DATE: 2000-11-37
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        229 DTGYIYTSSMDKTEKOAGOG------
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Patent No. US20020052308A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
                                                                                                                                                                                                                                                              Prokaryotes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , URGANISM: Staphylococcus aureus
US-09-815-242-5845
                                                  Wall, Daniel
Trawick
                                                                                                                                                                               Yamamoto, Robert T.
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                Haselbeck, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 14110
                                                                                                                                                      Carr, Grant J
                                             Ohlsen, Kari
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1036 ----TLAGTHMIMARLANSNVSDAOPMTFVADKDRAVVVLQTSKAEIIGNGVDETTLTA 1090
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85 TVGDTSS--VASISNNATRLPVPVDPGVVLQ----GFPSSLGSNRIYCGGVGSCQVMIDP 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139 VI-----SPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKRLDGDQNNVVR 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 FFMSTDQNSVGN------PNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQ 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55 KOKKPTLRG--MGVAKLERQRIEEEK-----KQLAAA 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Xu, H. Howard
TITLE OF INVENTION: GENES IDENTIFIED AS REQUIRED FOR PROLIFERATION IN
TITLE OF INVENTION: ESCHERICHEA COLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSASSTTINPYFNE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels 125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 2383;
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18.9%; Pred. No. 38;
ive 58; Mismatches 147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TILE REBERGE, ELIZARA (OLIVIA)
CURRENT APLICATION NUMBER: 19709/912,020
CURRENT PILING DARE: 106.07-21
PRIOR FILING DARE: 2006-01.27
PRIOR FILING DARE: 2006-01.27
PRIOR FILING DARE: 1999-01.27
PRIOR FILING DARE: 1999-01.27
NUMBER: 05.00 IN 005: 445
CONTHARE: PRISED OF WINDOWS VERSION 3.0
                                                                                                                                                                                           Sequence 302, Application US/09912020 Patent No. US20020045592A1
                                                                                                                                                                                                                                                                                                                                                                                                           Carr, Grant J.
Yamamoto, Robert T.
                                                                                                                                                                                                                                                                                                   APPLICANT: Ohlsen, Kari L.
APPLICANT: Trawick, John
APPLICANT: Forsyth, R. Allyn
APPLICANT: Froelich, Jamie M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 18.9
Matches 77; Conservative
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APPLICANT: Ohlsen, Kari L.
                                                  1086 FTGQMGSTV 1094
282 FPGKYGERV 290
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US-09-912-020-302
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APPLICANT:
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Nucleic Acids, Proteins and Antibodies

APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Protei FILE BERRENCE: PA106 CURRENT APPLICATION NUMBER: US/09/925,301

Sequence 5845, Application US/09815242 Patent No. US20020061569Al GENERAL INFORMATION:

US-09-815-242-5845

RESULT 13

GENERAL INFORMATION

Db 88 LTVSGIPTIASGVMIHQPIPQVLPANMAINVQAVHGGNIHAPNAV 133	Qy 135 -MIDPV	Db 134 HPMVIPIMAQPAPIHASAASPQPATSPWPISTYTPVPSQSFTSFQSSIGSIQSNS 188	Qy 171 RCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIP-PPMNGYDQYLLQSDHHQRS 222	Db 189 DVSSIFSNHNVRVNTPRSVPNSPNDGYLHQQHIPQQYQHQTASPSVA 235	QY 223 -QGFLYDHRIARAASVSASSTII-NPYFNBATNHTGPMEBFGSYMEGNPRNGS 273	Db 236 KOOKTPAHSLASALSTLOKKTPVSAPSTTIESPSSPSDSSHTSASSSAISLPFSNAPSOL 295	Oy 274 GGWEYE 280 .
			-				
CURRENT FILING DATE: 2001-08-10 PRIOR PLACEATION NUMBER: 02/USCO/05892	PRIOR FILING DATE: ZUOU-U3-08 PRIOR APPLICATION WHORE: 60/124,270	NUMBER OF SEQ ID NOS: 1694	SUPTIWARE: Patentin ver. 2.0 SEQ ID NO 1409	LENGIH: 488 . TYPE: PRT	ORGANISM: Homo sapiens S-09-925-301-1409	Query Match 5.1%; Score 83; DB 10; Length 488;	Best Local Similarity 20.95; Fred. No. 3.2; 1 Matches 42; Conservative 13; Mismatches 53; Indels 48; Gaps 8;

Search completed: January 26, 2003, 00:07:52 Job time : 25 secs 296 AVAKELE 302 338 STTQNNTGKPATSSANQKPVGLTGLATSSKGGI------GSKIGSNNSTTPTV- 384 9 STDQNSVGNPNDLLRN-----TRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPTLR 62

385 ------PLKPPPPLTLGKTGLSRSVSCDNVSKVGLP-SPSSLVPGSSSQLSG 429 63 GMGVAKLERQRIEEEKKQLAAATVGDTSSVASIS-NNATRLPVPVDPGVVLQGFPSSLGS 121 122 NRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSS 157 430 N----GNSGTS------GPSGST-TSKTTSESSS 452 ESULT 15 S-09-801-368-210

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APPLICANT: Salman, SOSIE
APPLICANT: Sherman, Amir
APPLICANT: Silva, Jeff
APPLICANT: Silva, Jeff
APPLICANT: Summers, Eric
PILE REPRENCE: IOST INDEXION: MEMbods for Improving Secondary Metabolite Production in Fungi No. US20020128250Alman, Thea Royer, John Salama, Sofie Sherman, Amir Sequence 210, Application US/09801368 Patent No. US20020128250A1 GENERAL INFORMATION:
APPLICANT: BASD, Robert
APPLICANT: Cali, Brian
APPLICANT: Hecht, Peter
APPLICANT: Holtuman, Doug
APPLICANT: Madden, Kevin Maxon, Mary Milne, Todd

APPLICANT: APPLICANT:

APPLICANT APPLICANT CURRENT APPLICATION NUMBER: US/09/801,368
CURRENT FILING DAFF: 3000-03-07
BRIOR APPLICATION NUMBER: US 09/487,558
PRIOR APPLICATION NUMBER: US 09/487,558
PRIOR PRICE STILNG DAFF: 1999-110-20 NUMBER OF SEQ ID NOS: 440 SOFTWARE: Patentin version 3.0 SEQ ID NO 210 LENGTH: 382

5.0%; Score 82.5; DB 10; Length 382; 22.5%; Pred. No. 4; tive 39; Mismatches 98; Indels 101. TYPE: PRT ORGANISM: Saccharomyces cerevisiae IS-09-801-368-210 Best Local Similarity 22.5 Matches 69; Conservative Query Match

16;

Indels 101;

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35 IRTETLKSRGRKPG-----SKTGQQKQKKPTLRGMGVAKLERQRIEEEKKQLAA 83

84 ATVGDTSSVASISNNATRLPVPVDPGVVL-QGFPSSLGSN-RIYCGGVGSGQV----- 134

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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.

1 protein - protein search, using sw model

January 26, 2003, 00:01:17 ; Search time 41 Seconds

(without alignments) 736.249 Million cell updates/sec US-09-701-023-4

1634 1 MATSLFFMSTDQNSVGNPND,.....TTSSLVGDCSPNTIDLSLKL 314 .tle: rfect score:

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283224 segs, 96134422 residues Gapop 10.0 , Gapext 0.5 BLOSUM62 coring table:

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283224

DB seq length: 0 DB seq length: 200000000 I mimin Iximum I

otal number of hits satisfying chosen parameters:

'st-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries tabase:

PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	hypothetical prote	hypothetical prote	zinc finger/leucin	myb-related transc		transcription fact				-	own prote			protein gp19 (Bact	probable finger pr	hypothetical prote	vacuolar protein V	hypothetical prote	unknown protein Fl	regulatory protein	hypothetical prote			-		RNA-binding protei	alcohol dehydrogen	c	hypothetical prote
SUMMARIES	ID	T05757	S67284	138759	T51685	T01196	S61977	T22166	T05566	T34368	T32594	A96783	T51246	S20480	AG1729	S51245	T24663	862982	T34434	н96792	S48941	T00621	T34369	B90053	\$57112	A55726	A49358	D90192	T11677	T05009
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æ	Query Match	9.66	6.7	6,5	6.3	6.1	6.1	6.1	0.9	0.9	-			٠.	5.00	5.8	5.8	5.8		- 1	5.8			5.7	5.7	5.7	5.7	5.7	5.7	9.6
٠	Score	1628	109	106	103	100	99.5	99.5	86	97.5	97.5	97	96.5	96.5	95.5	95.5	95.5	95.5	95.5	95	95	94	94	m	93.5	93	93	92.5	92.5	95
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hypothetical prote	hypothetical prote	DNA-directed DNA p	thyroid hormone re	ribosomal protein	hypothetical prote	nuclear pore compl	hypothetical prote	205K microtubule-a	protein H05C05.1 [Scdl protein - fis	finger protein AZF	hypothetical prote	hypothetical prote	myoblast city prot	core protein II [i	
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419	434	788	1424	288	632	959	967	1163	828	872	914	1030	1203	1970	454	
5.6	5.6	5.6	9.6	5.5	5.5	5.5	5.5	5.5	5.5	5,5	5.5	5.5	5.5	5.5	5.5	
92	91.5	91	91	90.5	90.5	90.5	90.5	90.5	96	06	90	06	06	90	89.5	
30	31	32	33	34	32	36	37	38	39	40	41	42	43	44	45	

hypothetical protein M4122.140 - Arabidopsis thaliana C.Species Arabidopsis thaliana (mousea ar cress) -C.Species Arabidopsis thaliana (mousea ar cress) - 1599 *text_change 04-Mar-2000

Accession: Try 100377; Transmission: Try 100375; Try 10037

Gaps 6 Length 314; Indels 4.3e-127; Score 1628; DB 2; 0; Mismatches Pred. No. 99.68; Query Match 99.69 Best Local Similarity 99.79 Matches 313; Conservative

0

61 LRGMGVAKLERQRIEEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSIG 120 121 SNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKR 180 STIINPYFNEATNHTGPMEEFGSYMEGNPRNGSGGVKEYEFFPGKYGERVSVVATTSSLV 300 1 MATSLFFMSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPT 60 1 MATSLFFWSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKRP 60 181 LDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSAS 301 GDCSPNTIDLSLKL 314 GDCSPNTIDLSLKL 314 241 301 g ò qq ŏ q à g ŏ g ò

hypothetical protein YOR372c - yeast (Saccharomyces cerevisiae) RESULT 2

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C.Generics;
A.Gener WH866
C.Superfamily, unassigned myb DNA-binding repeat proteins; myb DNA-binding repeat hr
C.Reywords: transcription factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            myb-related transcription factor MTB66 [imported] - Arabidopsis thaliana (fragment) (S. Specker Arabidopsis thaliana (mouse-mar created) (S. Specker Arabidopsis thaliana (mouse-mar created) (S. Specker Arabidopsis Thaliana (mouse-mar created) (S. Specker S. Aray-2000) Sesquence Evolsion 18-Ang-2000) *text...change 17-Nov-2000
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C. Species: Arribidopsis thaliana (mouse-ear cress)
C. Species: Arribidopsis thaliana (mouse-ear cress)
C. Arcession: TOIL96
C. Arcession: TOIL96
S. Pohlfing, T. David, M. P. O'Brian, D. Submitted to the EMBL Data Library, April 1999
A. Reference number: B. Sequence of A. thaliana F21210
A. Reference number: B. Schools (PARS)
A. Reference number: To Touring (PARS)
A. Status: Kranslated from GRPMBLA/DBDJ
A. Status: Kranslated from GRPMBLA/DBDJ
           187 NVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSASSTTINP 246
                                                                                                                                                                                                  596 NVVSGSG-----SSTPVSSSHLPO---OSSGHLOOVGALSPSAVSSAAPAVATT---- 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120 TTVSDQIVSLISSMSTSSSPTPMTSNFSPAPNNWBQLNYCNTV-----PSQSNSIYSA 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           173 FFG-NQYTEASQTMNNNPLVDQHHHQDMKSWASE--ILHYTEHSQSSETVIEAEVKPD 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82 AAATVGDTSSVASISNNATRLPVPVDPGVVL---QG---FP---SSLGSNRIYCGGVGSG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69 TSSEV--VKSTGSINNLH-----DQSMVVSSQQGPWWFPANTTTINQNSAFCFSSSNT 119
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No. 0.57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41; Mismatches 107; Indels
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T01196
transcription factor MYB4 - Arabidopsis thallana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ch 6.3%; Score 103;
1 Similarity 23.3%; Pred, No. 0
60; Conservative 41; Mismatch
                                                                                                                                                                                                                                                                               247 YFNEATNHTG-PMEEFGSYMEGNPRNGS 273
                                                                                                                                                                                                                                                                                                                                                     642 --- DANTLSGSSLSQAPSHMYGNRSNSS 666
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A.Rocsidente Press DNA
A.Rocsidente Care SMB1.27280; NID:91420803; PID:e252195; PID:91420804; GSFDB:GN00015; A.Experimental sources a farian S2886.
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Cibate. 29-May-1958 sequence_revision 29-May-1998 #text_change 05-Nov-1999
RCChaplin, T.: Avicon. P.: Bernard, O.A.: Saha, V.; bella Valle, V.; fillion, J.; Gregord RCChaplin, T.: Avicon. P.: Bernard, O.A.: Saha, V.; bella Valle, V.; fillion, J.; Gregord Lough St. Avittle: A novel class of faint finger/leactine sipper genes identified from the molecular Avittle: A novel class of faint finger/leactine right.
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Alterente names: hypothetical protein 06682
C.Species: Saccharomyces cerevisiae
C.Species: 2-301-1966 #sequence_revision 12-301-1996 #text_change 19-Apr-2002
C.Accession: 567284
Pobliss H.; Mebling U.; Moffmann, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66 VAKLERQRIEEEKKQLA----AATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         168 SNNRCDTCFKKKRLIXSDQNNVVRSNG------GGFSKYTMIPPPMNGYDQYLLQSDHH 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71 FANTDAHNSSSNESSLVENSIL------ 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 SNRIYCGGVGSGQVMID-----PVISPWGFVETSSTTHELSSISNP-QMFNAS 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   151 SEFLVASPEOFKEFLLDSPSTNFNFHKTPAKTPLRFV-TDSNGAQQSTTENPGQQQNVF 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      210 SN------VDLNNLLKSNGKTPSSSCTGAFSR----TPLSKIDMNL----- 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A.Cross-references: EMBL.U13948, NID:9538276; PIDN:AAA79972.1; PID:9538277 A.Cross-references: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genetics: A.Genet
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIYCGGVGSGQVMIDPVI 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 PMSTD-QNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPTLRGMG 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30 NSSGEIRTETLKSRGRKPGSKTG------QQKQKKPTLRGMGVAKLERQRIEEEKKQ 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98:
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23.1%; Pred. No. 2;
ive 40; Mismatches 106; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   79; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             220 ORSOGFLYDHRIARASVSASSTTINPYFNEATNHTG 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   246 -----MFNOPLPISPSKRFSSLSLTPYGRKILNDVG 276
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A:Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6.7%; Score 109; DB 322.7%; Pred. No. 0.48;
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A:Cross-references: SGD:S0005899
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Matches 63; Conservative
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Best Local S
Matches 62
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C.Accession: T05566
R.Beers, M.; Medler, H.; Wedler, E.; Wambutt, R.; Hoheisel, J.; Mewes, H.N.; Mayer, K submitted to the Protein Sequence Database, February 1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A:Cross-references: EMB:268298; PIDN:CAA92607.1; GSPDB:GN00022; CESP:F44D12.1
A:Experimental source: clone F44D12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein F22K18.130 - Arabidopsis thaliana
C.Species: Arabidopsis thaliana (mouse-ear cress)
eter. 22-ept. 1999 sequence_revision 23-Apr.1999 *text_change 23-Jul-1999
                                                                                                                                                                                                                                                                                                            hypothetical protein F44D12.1 - Caenorhabditis elegans
C.Specias Caenorhabditis elegane.
C.Bate: 13-0ct-1999 #sequence_revision 15-0ct-1999 #text_change 15-0ct-1999
99 ATRLPVPVDPGVVLQGFPSSL-----GSNR--IYCGGVGSGQVMIDPVISPWGFVETSS 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIH-ELSSISN---POMFNASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPM 206
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MATSLFFMSTDQNSVGNPNDLLRNTR-------LVVNSSGEIRTETLKSR 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44 GRKPGSKTGOOKOKKPTL-----RGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNN 98
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        347 -TKRGDHNGKDKHROTIFSRWFSRNGG-----SDKERTVVAKANIDRSNDQVLLRQG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               398 SLRMP-----QASPASMSPLVRYGSLRAPTYSSSIDHTKLMLDALDKRF---NAKS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6.1%; Score 99.5; DB 2; Length 1034; 20.0%; Pred. No. 6.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                          212 YLLQSDHHQRSQGFLYDHRIARAASVSASSTTINPYFNEATNHTG 256
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                                                                                                                                                        617 HTTDGDSNNQSNSSTYD----AAATAYNGNTGLTPYINTAQTPLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         52; Mismatches 123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Status: preliminary; translated from GB/EMBL/DDBJ
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A; Cross-references: EMBL:AL035356
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Matches 62; Conservative
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A; Residues: 1-1034 <WIL>
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                                                                                                                                                   .Map position: 5
Throns. 45/1: 105/2
.Mote: 721810.4
.Superfamily: unassigned myb DNA-binding repeat proteins; myb DNA-binding repeat homold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cross-references: EMBL:U43281; NID:g1151218; PID:g1151237; GSPDB:GN00016; MIPS:YPL089c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wang, Y.; Ahmed, A.; Bussey, H.; Portin, N.; Friesen, J.D.; Hall, J.; Storms, R.K.; Umbritch to the RMEL Data Library, December 1995. Pescripton: The sequence of Saccharomyees cerevisiae chromosome XVI left arm. Accession: S61979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10;
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Accession: S61977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481 TTTL--TGRPPSTFSGPE----TSNGPPTGSLPSKPVHD-----LMSNSPNVSSIS 525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97 NNATRLPVPVDPGVVLQGFPS-SLGSNRIYCGGVGSGQVMIDPVISPWGF--VETSSTTH 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               111 TRLPGRIDNEIKNFWNSCLKKKLRRKGI---DPTTHKPLIIN-----ELOSLNVIDOKL 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82 AAATVGDTSSVASISNNATRLPVPVDPGVVL---QG----FP---SSLGSNRIYCGGVGSG 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .33 QVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKRLDGDQNNVVRSN 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     37 TETLKSRGRKPGSKTGQQKQKRPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASIS 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TRLVVNSSGEIR---TETLKSRGRKPGSKTGQQKQKKPTLRGMGVAKLERQRIEEEKKQL 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           193 GGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSASSTTI-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----NPGTFPPVQTAVNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      162 TSSEV--VKSTGSINNLH-----DOSMVVSSQQGPWWFPANTITTNQNSAFCFSSSNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             213 TTVSDQIVSLISSMSTSSSPTPMTSNFSPAPNNWEQLNYCNTV-----PSQSNSIYSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Reywords: nucleus; transcription factor
2-57/Domain: serum response factor DNA-binding domain homology <SRE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       53;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Superfamily: serum response factor DNA-binding domain homology
                                                                                                                                                                                                                                                                                                                                                                     , DB 2; Length 369;
1.5;
                                                                                                                                                                                                                                                                                                                                                                                                                              42; Mismatches 107; Indels
                            Cross-references: EMBL:AF058914; NID:g3047074; PID:g3047079; Experimental source: cultivar Columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ranscription factor RLM1 - yeast (Saccharomyces cerevisiae); Alternate names: protein LPG19c; protein YPL089c
                                                                                                                                                                                                                                                                               Reywords: DNA binding; transcription regulation; 79-129/Domain: myb DNA-binding repeat homology <WYB>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----FPDWSMGPNSAKPGNTN---
                                                                                                                                                                                                                                                                                                                                                                     Query Match 6.1%; Score 100;
Best Local Similarity 22.9%; Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              :Gene: SGD:RLM1; RLM1; MIPS:YPL089c;Cross-references: SGD:S0006010;Map position: 16L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       :Species: Saccharomyces cerevisiae
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                323 IANYYWRSASSSSSPNOE 340
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Best Local Similarity 22.7%
Matches 51; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                   59; Conservative
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Residues: 1-676 <WAN>
    Residues: 1-369 < DAV>
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Cy 163 MFNASSNNRCDTCFKKKRLDGDQ191	241 VXCPPPVITVRFTVGPCQCTGRWVYNGDLALAF 192NGGGFSKYTMIP-PPMNGYDQYLLQSDH 11	Db 301 LTMUVAGNOPSQLITLIFYPDSNTYPTYPYGMIRSVNDIGNYIDALSPLPLA 351 Oy 228DHRTARAAS-VSSSTTIIN 445	Db 352 TEDFRISDALTFISAQFITLM 372 RESULT 10	712559, hypothetical protein COZB10.5 - Caemorhabditis elegans C:Species: Ceenorhabditis elegans C:Species: Ceenorhabditis elegans C:Species: 29-oct-1999 fesqueec_evision 29-oct-1999 #rext. change 28-oct-1999	C. Accession: 123594 R. Helston, J.; White, S.; Hawkins, J.; Wohldmann, P. stumitted to the EMBL Data Library, December 1997 A. Description: The Sequence of C. elegans cosmid 00210.	A; Reference number: 221196 A; Accession: 97328; prelliniary: Translated from GB/RMBL/DDBJ A; Accession: 97328; translated from GB/RMBL/DDBJ A; McDiecule type: DNA	A.Restoures 1.658 <are. A.Cross-references: EMBL.AR038605; PIDN:AAB92020.1, GSPDB:GN00022; CESP:COZBIO.5 A.Experiental source: strain Bristol N2: clone C02BIO</are. 	A.Gene. CERP: CD2B10.5 A.Mep position: A.Introns: 61/3: 102/2: 188/3: 349/2: 641/1	Quary Match 6.04, Score 97.5, DB 2; Length 698, Hest Local Similarity 18.44; Pred. No. 5.9; Matches 64, Ocoservative 67; Mismatches 110; Indels 107; Gaps 15;	OY 19 NDLANTBLYWNSSDEIRTETLKERGRKPOSKTGOQKOKKPTLRGMGV	Oy 67	QY 103 PVPVDPGVVLQGPPSSLASNR1VCGGVCSQVMIDPVISFWGFVETSSTTHELSSISNPQ 162 159 PMSSQPSSHQSSTSSTWARHGLANGFSSGPELENNRSNDPQCMSSFW 708	OY 163	OY 211 QYLLOSDHGORSOEL-YDHRI-ARABYSASSTI'NBYRNBATNHTGPNEEF 261			MODEMS protein F22H5.2 [Lumported] - Arabidopsis thaliana C:Species: Atabidopsis thaliana (mouse-ear cress) C:Date: 02-Mar-2001 sequence_revision 02-Mar-2001 text_change 31-Mar-2001	C.Accession: A45783 R.Theologis, A.S. Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alr Chin, C.W.; Chung, W.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Deway
A;Introns: 10/2; 37/2; 171/3; 206/1; 285/3; 662/2; 738/3 A;Note: F22KIB.120	Query Match Best Local Similarity 21.94; Perel No. 15. Marches 80; Conservative 37; Mismatches 106; Indels 142; Gaps 19; Marches 80; Conservative 37; Mismatches 106; Indels 142; Gaps 19;	Oy 3 TSLEPNSTDQNSVGNPNSVGNB 34 Db 658 TSLERRIPOQPOGRADEQTKRIVNSBGNDAMQATTVNSGSSSHTTANTESFERUVUDS 717	QY 35 IRTETLKSRGRKPGS DD 718 INTELL DD 718 INTELL TI 1 1 1 1 1 1 1 1 1 1	OY 71RORLEBEKKOLAAATVOLTSSVASISNNATRLEPVPUPPCVVLQGFPSSIGSNR1 124 DD 774 ELINRSOGYVENEZASNASPADRITPGSIGSNRTNSV 816	Qy 125 YOGGUGGOUMIDPYISPMGFVETSSTRHELSSISNPQMFNAGSNNRCDYCFKKKELDGD 184 Db 817 SPTG-GSK	Oy 185 ONNVASNOGGERKYRIPPHNGYDOYLLGSDHHORSOGFLYDHRIARANSVSASITI 244 Db 645 ONNEWD-GLAGIE	Oy 245 NPYPREATMHTGPMERCGYMBGNPBNGSGGWRYBEFBGRYGRVATT 396 DD 888 WFSFBVASSWSGMRANSFFFRANKRUKKKRARETAMHTT 941	Oy 297 SSLVG 301	RESULT 9	Mystekeria protein 1702.2 - Caenorhabditis elegans C. Spottes: Caenorhabditis ciegans celes iegans 29-oct-1999 C. Deces 1907. 174369 Recquence_revision 29-oct-1999 *text_change 29-oct-1999 C. Accession. 174369	Figweil A. A. Bost. A. A. A. A. A. A. A. A. A. A. A. A. A.	A.Accession: 194368 A.Accession: 194368 A.Status: pretiminary: translated from GB/EMBL/DDBJ A.Molecule Type: Joh	A; Resoluces: 1.551 cRN7. A; (FOSSS-Teferences: RMBL:U41263; PIDM:AAC24423.1; GSPDB:GN00020; CESP:T19012.2 A; EXPREDIMENT SOURCE: Efficial Bristol N2; clone f19012	A:Map position: 2 A:Introns: 25/1; 151/2; 214/1; 282/3; 333/2; 443/2; 469/2; 492/2	Query Match 6.0%: Score 97.5; DB 2; Length 561; Best Lond Limilarity 21.8%; Percel, No. 4.3; Percel, No. 4.3; Matches 70; Conservative 42; Mismatches 108; Indels 101; Gaps 15; Matches 70; Conservative 42; Mismatches 108; Indels 101; Gaps 15;	OY 9 STOOMSVORPUDLANTRLYVNSSGEIRFETLKSRGRREGSKTGOGKOKKPTLAGMGVAK 68 Db 69 STOOMAL	Oy 69 LERORIEBERKOLAAATVGDTSSVARISNNATRLPV-PVDPGVVLQGFPSSLGS 12.1 Db 125SPOFFNULYAFRGALDSOSSISOALAVTTSLPACKSSLIVGRAANID 180	Oy 122 NSHYGGGGGGGGGWIDPYTSPRGPVETSSTHELSSTSNPQ 162 Dh 181 MTARTHWID REPRESENT VANISHING REPRESENTED AND AND AND AND AND AND AND AND AND AN

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C:Date: 19-Mar-1997 #sequence_revision 25-Apr-1997 #text_change 08-Oct-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross=references: EMBL:M59763; NID;g148630; PIDN:AAA98061.1; PID;g148633 S;Conetics: Ascense plasmad P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 SNRIYCGGVGGQVMIDPVISP--WGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKK 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              567 SSDSVTGGADSTMSAQDSMMASRMRSAVESYAKAHNISNEQATRELASRSTNASLGLYGD 626
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      682 ATOD-----FKEASDYFTSRKYSESGSHIDNNADSRVDOLSAALNSAKOSYDOYTINMIR 736
                                                                                                                                                                                                                  70 ERQRIE----EEKKQLAAATVGDISSVASISNNATRLP-----VPVDPGVVLQGFPSS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                          464 IRQPMLSNRISERSGFSGRNNIPESSRVLPTSYTNL-TTQHSSSSMPYNNFQPELPVNSF 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLL-QSDHHQRSQ 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      523 PLASAPGISVPVRKAT---SXOEEVNSSEAGF----ITP---SYDMFTTRONDWDLRNI 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              572 GIAFDSHQDSESAAFSASEAYSSSSMSRHNTTV----AATEHGRNHQQPPSGWVQHHQV 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----IAAAQQEMAREASNRAESALHGFSSSIASAWN------TLSQFGSNRG 566
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                                                                                                                                      350 LGRP-AMVSKSGLPVSSIVDERSIFSFDNTKTRFGGGLGHHGQQPQQPQQNNLLHGVPTG 408
                                                                                                                                                                                                                                                                                  109 LOQOLPMGNRMSIQQOIAAVRAGN----SVQNNGMLMPLAGQQSLPRGPPPMLTSSQSS 463
                                                                                                                                                                                                                                                                                                                                                                    LG----SNRI--YCGGVGSGQVMIDPVISPWGFVETSSTTHELSSIS----NPQM----F 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GFLYD-HRIARAASVSAS-----STTINPYFNEATNH-----TGPMEEFGS 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 ATSLFFMSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKP-GSKTGQQKQKKPT 60
                                                                VGNPNDLLRNTRLVVNSSGEIRT----ETLKSRGRKPGSKTGQQKQKKFTLRGM-GVAKL 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 239 ASSTTINPYFNEATNH--TGPMEEFGSYMEGNP------RNGSGGVKEYEFFPGK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          479 STISFGOMMYOIGSGAIATOIRDGNMVMDASG-----AMSRLPVGINATRO----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        153;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SHEYAEMASRIESMSGQMSE---DLS 759
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(A.) Li, J. H., Li, Y.; Lin, Y.; Liu, S. X.; Liu, Z.A.; Luros, J.S.; Majkin, E.; Kim, C.; Khan, S.; Khaykin, E.; Kim, C.; Kather, Li, Y.; Lin, Y.; Liu, Y.; Liu, Y.; Liu, Y.; Liu, Y.; Liu, Y.; Liu, Y.; Liu, Y.; Liu, Y.; Liu, Y.; Liu, Y.; Liu, Y.; Matthers, Salzberg, S.L.; Schwartz, J. B.; Stinn, P.; Southarick, A.M.; Sun, H.; Tallon, er, M.; Wh. D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R. N.; Sun, H.; Tallon, Reference and analysis of chromosome 1 of the plant Arabidopsis, Accession: A96781
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21;
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                                                                                                                                                                                                                                                                                                                                                              .RXI protein (imported) - Arabidopsis thaliana
;Species: Arabidopsis thaliana (mouse-aar cress)
;Pate: 28-Jul-27000 sequence_revision 28-Jul-27000 ttext_change 08-Dec-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     261
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EROR------IEEEKKOLAA----ATVGDTSSVASISNNATRLPVPVDPGVVL 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               219 EADOGOOKSKETEKLALQETKRSLQAVGREDATRSKTTRHMAAASETTRGPRDL---- 272
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ------PEKKTETQNRTEIPIDDNHQKTKGALTSNLG 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             160 NPQMFNASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPPMNGYDQ----YLLQ 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               304 NPRVTNREGSSSMSRKIKEDIRD------GISKLTW--GKSNGDDKSVSVYTLT 349
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -OKKPILRGMGVAKL 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.9%; Score 97; DB 2; Length 593;
21.4%; Pred. No. 5.2;
ive 44; Mismatches 112; Indels 130;
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23.7%; Pred. No. 6.7;
tive 51; Mismatches 118; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23 RNT---RLVVNSSGEIRTETLKSRGRKPGSKTGQQK-
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:Superfamily: response regulator homology
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;Sakal, H.; Aoyama, T.; Bono, H.; Oka,
lant Cell Physiol. 39, 1232-1239, 1998
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Matches 78; Conservative
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Best Local Similarity 23.7%
Matches 79; Conservative
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Mon Jan 27 14:06:02 2003

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378 ONLEDNKNPLFSNINMNRPQSSSLRSTTPNGVNQFLNMNQTTISRISSPLLSRMMDLSNI 437
                                                                                                                                                                                                       57 KKPTLRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNATRL----PVPVDPGVVL 112
                                                                                                                                                                                                                                                                                                                                                                                                               113 QGFPSSLGSNRIYCGGVGSGOVMIDPVISPWGFVETSSTTHELSSISNPOMFNASSNNRC 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       497 NG---SQNHNNVNANGINTS------AAASINNNISSTNN-SANNSSSNNNV 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               173 DICFKKKRLDGDQNNVVRSNGGGFSKYIMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIA 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               539 STV------PSSMMHSS-----TLWGTSG--LGGDND------DNMLA 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               568 ISLATLANSATASPRLTLPPLSSPMNPNGHTSYNGNMMNNNSGNGSNGSNSY----SNG 622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       233 RAASVSASSTIINPY----FNEAINHIGPMEEFGSYMEGNPRNGSGGVKEYEFFPGKYG 287
12 QNSVGNPNDLLRNTRLVVNSSGEIRT------ETLKSRGRKP--GSKTGQQKQ 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               623 VITAAATTISAPHNLSIVSPNPTYSPNPLSLYL 655
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Best Local Similarity 20.7%; Pred No.12; No.12; Indels 87; Gaps
Marches 69; Conservative 4.2; Mismatches 135; Indels 87; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44 RITNLVIASGGNSSNEVVDLR------VSKLQNKIFELAKDRLD 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 2; Length 342;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.8%; Score 95.5; DE 22.3%; Pred. No. 3.2;
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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.

M protein - protein search, using sw model

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UG-09-701-023-4 1 034 WHSLFFMSTDQNSVGNPND......TTSSLVGDCSPNTIDLSLKL 314 itle: erfect score: edneuce:

BLOSUM62 Gapop 10.0 , Gapext 0.5 coring table:

112892 segs, 41476328 residues earched:

otal number of hits satisfying chosen parameters: inimum DB seq length: 0 aximum DB seq length: 2000000000

112892

ost-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt_40:* atabase : Pred. No. is the number of results predicted by chance to have a cancer greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	O54826 mus musculu	P55197 homo sapien	sacch	P33790 escherichia	P07856 bombyx mori		P33400 saccharomyc			Q61545 mus musculu		P13846 heron hepat		P23226 drosophila			P40995 schizosacch	sacch	015067 homo sapien	O60044 neurospora	7	ā	-		Q05153 arabidopsis	Q02630 saccharomyc	P43572 saccharomyc	9	_		_	P24276 saccharomyc	O9wui9 rattus norv
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15 VGNP--NDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTG------OOKQKKPTLRG 63

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64 MGVAKLERQRIEBEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGEPSSLGSNR 123	FT DOMAIN 856 861 POLY-SER, FT SITE 266 266 MLL FUSION POINT (IN ACUTE MYRICOTO
	LEUKEMIA PATIENT 643 643 MLL FUSION POINT
LSSISNPQMFNASSNNRCDTCFKKKRLDG	SITE 680 680 MLL LEUI
532SVGSSPVGSEISMQYRHDGACPTTTFSELLNA 563	SQ SEQUENCE 1027 AA; 109026 MW; 7C7C0059DDD46589 CRC64;
184 DQNHVPRSNGGGFSKYTMIPPPRNGTDQYLLQSDHHORSQGFJXDHRIARAASVSASS 241 - - - - - - - - - - - - - - - - - - -	Query Match Best Local Similarity 6.54: Score 106; DB 1; Length 1027; Best Local Similarity 4.1, Fred No. 0.94. Matches 72: Conservative 40; Mismatches 106: Indels 60; Gaps 1
242 TTINPYFNEATHIGPMEEFGSYMEGNP 269	QY 30 NSSGEIRTETLKSRGRKPGSKTGQXQKKRTLRGMCVAKLERQRIEBERKQ 80
618 VTPAAATTOANTVSGSSLSQAPAHMYGSRLNONP 651	Db 435 NSPGDLGNSSLPTAGYKRAQTSGIEBETVKEKKRKGNKQSKHGPGRPKGNKNQENVSH 492
RESULT 2	Qy 81 LAAATVGDFSSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIYCGGVGSCQVMIDPVI 140
HUMAN AFIO_HUMAN STANDARD; PRT; 1027 AA.	TSSSLOKSPI
01-02T-1996 (Rel. 34, Created) 01-02T-1996 (Rel. 34, Last sequence update)	Oy 141 SPWGFVETSSTTHE-LESIGNPOMPNASSNNRCDYCFKKKRLDGDQN186 Db 536 SPWGSELSMQYRHDGAPTYFSBLLANIHNDRDSSTATAKQELKTGYTSMDVAYSFP 595 Db 536 SPWGSELSMQYRHDGAPTYFSBLLANIHNDRDSSTATAKQELKTGYTSMDVAYSFP 595
15-JUN-2002 (Rel. 41, Last annotation update) AF-10 protein.	OV 197 NVVPSNCCCPSKYTMTDDDMXCXDOYLLOSOUDADAAGAGAGAGGTAD 246
MILTIO OR AFIO. Homo sapiens (Human).	596 NVVSGSGSSTPVSSSHLPQOSSGHLQOVGALSPSAVSSAAPAVATT
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.	Qy 247 YENBATNHTG-PMEBFGSYMBGNPRNGS 273
NCBI_TaxID=9606; [1]	Db 642 OANTISGSSTAOADSHAYGNBSASS 666
VCE PROM N.A. PubMed=7888665:	
n T., Ayton P., Bernard O.A., Saha V., della Valle V.,	RESULT 3
*A novel class of zinc finger/leucine zipper genes identified from the molecular clother of the tilture in translocation is	ID STANDARD; PRT; 676 AA.
leukemia; Blood 85:1435-1441(1995)	
BCELLUIA LOCATION, Nuclear (Potential).	DI 15-JUN-2002 (Rel. 41, Last annotation update)
SEASE INVOLVED IN ACUTE LEUKENIS BY A CHROMOSOMAL	
TRANSLOCATION T(10:11)(P12:Q23) THAT INVOLVES MELTIO AND MEL/HRX. THE RESULT IS A ROGUE ACTIVATOR PROTEIN.	OS Saccharomyces cerevisiae (Baker's yeast). OC Bukaryota, Fungi, Ascomycota, Saccharomycotlna, Saccharomycetes;
MILARITY: BIGH, TO AF17. MILARITY: CONTAINS 2 PHD-TYPE 2INC FINGERS.	
-!- DATABASE: NAME-Atlas Genet. Cytogenet. Oncol. Haematol.; WWW**http://www.infobiogen.fr/services/chromcancer/Genes/AF10.html".	RN [1]
WISS-PROW entry is convignit It is produced through a collaboration	
the Swiss Institute of Bioinformatics and the EMBL outstation -	
the burghean bloanformatics institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way	
ed and this statement is not removed. Usage by and for commercial es requires a license agreement (See http://www.isb-sib.ch/announce/	
or send an email to license@isb-sib.ch).	RN [2]
EMBL; U13948; AAA79972.1; Genew; HGNC:16063; MLLT10.	
MIM; 602409;	RA Bussey H., Storms R.K., Ahmed A., Albermann K., Allen E., Ansorge W.,
ALICETRIO) ERROGISOS; ZNI_FRID. Pfam; PP00628; PHD; 1.	RA Araujo K., Aparicio A., Barrell B.G., Badcock K., Benes V., RA Botstein D., Bowman S., Bruckner M., Carpenter J., Cherry J.M.,
SMART; SM00249; PHD; 2. PROSITE; PS01359; ZF_PHD 1; 1.	RA Chung E., Churcher C.M., Coster F., Davis K., Davis R.W., RA Diefrich F.S., Delius H., DiPaolo T., Dubois F., Duesterhoeft A.
PROSITE; PS50016; zE_PHD_2; 2. Nuclear profeth: Zinc-finger: Repeat: Chromosomal translocation:	RA Duncan M., Floeth M., Fortin N., Friesen J.D., Fritz C., Goffeau A.,
Yoto-oncogene, 22 74 pun, mype 1	RA Hunicke-Smith S., Hyman R., Johnston M., Kalman S., Kleine K.,
68 85	RA Marathe R., Messenguy F., Mewes HW., Mirtipati S., Moestl D.,
229 240	KA MUCLIEF-AUET S., Namatn A., Nentwich U., Oether P., Pearson D., RA Petel F.X., Pohl T.M., Purnelle D., Schafer M., Schafe M.,
794	RA Scherens B , Schramm S , Schroeder M Sdicu A M , Tettelin H ,

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Urcestarau L.A., Oshinsky S., Vierendeels F., Vissers S., Voss H., Malls S.V., Manbut L. X., Mang Y., Hedler E., Wedler H., Minnett E., Shong W. H., Zollner A., Vo.D.H., Hahl J., The nucleotide sequence of Saccharomyces cerevisiae chromosome XVI."; Minner 387:103-106 1997).
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CHARACTERIZATION. MEDLINE-97219975; PubMed-9121433;

Dodou E. Treisman R. Treisman

SUBUNIT: CAN HETERODIMERIZE WITH SPM1.

SUBCELLULAR LOCATION: Nuclear (Potential). SIMILARITY: BELONGS TO THE MADS DOMAIN FAMILY OF TRANSCRIPTION FACTORS. MEF2 SUBFAMILY This SWISS-PROF entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the BMED outsitution the Buropean Bioinformatics Institute. There are no restrictions on its use by non-port institutions along as its content is in no way modified and this studement is not removed. Usage by and for connected entities a flucture agreement (See http://www.isb-sto.ch/announce/or send an email to licensetiab sib.ch).

EMBL; U43281; AAB68210.1; -. EMBL; D63340; BAA09658.1; -. HSSP; P11746; 1MNM. TRANSFAC; T01783;

SGD; S0006010; RLM1. InterPro; IPR002100; TF_MADSbox. Pfam; PF00319; SRF-TF; 1. PRINTS; PR00404; MADSDOMAIN.

SMART; SM00432; MADS; 1, PROSITE; PS00350; MADS_BOX_1; 1. PROSITE; PS50066; MADS_BOX_2; 1.

franscription regulation; DNA-binding; Nuclear protein. DOMAIN DNA_BIND

MEF2-TYPE (POTENTIAL). POLY-GLN POLY-ASN. OLY-ASP POLY-SER 58 129 207 229 414 567 567 AA; DOMAIN DOMAIN

6.1%; Score 99.5; DB 1; Length 676; 9CE6B3DE47632747 CRC64; POLY-ASN 73483 MW; SEQUENCE Query Match DOMAIN

481 TITL--TGRPPSTFSGPE----TSNGPPTGSLPSKFVHD------LMSNSPNVSSIS 525 37 TETLKSRGRKPGSKTGOOKOKKPTLRGMGVAKLERORIEEEKKOLAAATVGDTSSVASIS 96 31; Mismatches

Bacteria; Proteobacteria; gamma subdivision; Enterobacteriaceae; 28, Created) 28, Last sequence update) 40, Last annotation update) 16-OCT-2001 (Rel. 01-FEB-1994 (Rel. 01-FEB-1994 (Rel. Escherichia coli. NCBI_TaxID=562; TraG protein. Escherichia Plasmid F.

938 AA

PRT:

STANDARD;

PRG1_ECOLI

rRG1_ECOLI

"Characterization of the F plasmid bifunctional conjugation gene MEDLINE-92204127; PubMed-1348105; Firth N., Skurray

SEQUENCE FROM N.A.

STRAIN=K12

Mol. Gen. Genet. 232:145-153(1992)

SEQUENCE FROM N.A. MEDLINE-94359430; PubMed-7915817; Frost L.S., Ippen-Ihler K., Skurray R.A.:

Analysis of the sequence and gene products of the transfer region of . Rev. 58:162-210(1994). the F sex factor Microbiol

SEQUENCE FROM N.A.

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STRAIN-LT, CR65;
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-!- PTM: TRAG* PROBABLY ARISES FROM THE POST-TRANSLATIONAL CLEAVAGE OF -!- CAUTION: TRAG IS NOT RESPONSIBLE FOR THE N-TERMINAL ACETYLATION OF F PILIN AS STATED BY SOME AUTHORS. -: - SUBCELLULAR LOCATION: Integral membrane protein, Inner membrane

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EMBL; U01159; AAC44184.1; -. EMBL; AP001918; BAA97959.1; -. EMBL; M59763; AAA98081.1; -. PIR; \$20480; \$20480. EcoGene; EG40114; traG

10;

Gaps

90; Indels

.8;

Pred. No.

51; Conservative

Matches

Best Local Similarity

CYTOPLASMIC (POTENTIAL). CYTOPLASMIC (POTENTIAL) PERIPLASMIC (POTENTIAL) Plasmid; Conjugation; Transmembrane; Inner membrane; TRAG* PROTEIN. POTENTIAL. POTENTIAL. POTENTIAL. 938 53 73 73 350 350 412 433 Complete proteome. DOMAIN TRANSMEM DOMAIN TRANSMEM DOMAIN CHAIN

Length 938; 9E09C8402ACDFDDF CRC64; DB 1; Pred. No. 4.9; Score 96.5; 5.9%; 102471 Best Local Similarity SEQUENCE Query Match

PERIPLASMIC (POTENTIAL)

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     189 TG----SSSNTDSNSSNAGSSTSGGSSTYGYSSNSR------DGSVSTTGSSSNTDSNS 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      124 IYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSIS---NPQMFNASSNNRCDTCFKKKR 180
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"The sequence of a 44 420 bp fragment located on the left arm of chromosome XIV from Sacoharomyces cerevisiae.";
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Kakaryota: Fungi, Ascomycota: Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
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01-0CT-1996 (Rel. 34, Last sequence update)
01-0CT-1996 (Rel. 34, Last annotation update)
01-0CT-1996 (Rel. 31, Last annotation update)
FRUGST (Repretentin OMP2-MSCS intergenic region. RRUGST OR N2467 OR NYLA967W.
                                                                                                                                                                                                                                                Length 389;
                                                                                                                                                                                              38820 MW; BA605BC0305EAF19 CRC64;
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                                                                                                                                                                                                                                            5.8%; Score 95.5;
20.1%; Pred. No. 1.
                                                                                                                                        POTENTIAL.
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EMBL; J01033; -; NOT_ANNOTATED_CDS.
EMBL; J01034; -; NOT_ANNOTATED_CDS.
EMBL; MG5101; AAA27843.1; -.
EMBL; M26102; AAA27844.1; -.
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Yeast 12:297-297(1996).
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MEDLINE-96021608; PubMed-8533472;
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                                                                                                   479 STISFGOMMYQIGSGAIATQIRDGNMVMDASG------524
                                                                                                                                                         LRGMGVAKLERQRIBEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLG 120
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    Gaps
                                                 2 ATSLFFMSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKP-GSKTGQQKQKKPT 60
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MICHAILE-8707653: PubMed-302742;
MICHAILE-8707653: PubMed-302742;
MICHAILE-8707653: A study of the produces multiple Sericin messenger RNAs in the silk gland of Excharge multiple Sericin messenger RNAs in the silk adad of Excharge multiple Sericin messenger RNAs in the silk gland of Excharge multiple Sericin messenger RNAs in the SILK HISTIRGENTY (15966).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-0403-198 (Rel. 09 Last sequence update)
101-0403-198 (Rel. 09 Last annotation update)
Servicin procursor (SILK 940 protein)
Servicin procursor (SILK 940 protein)
Bokaryota, Medanoa, Arthropoda, Mandibulata; Pancrustacea; Hexapoda;
Insects; Persyota, Webpeta; Rodopersyota; Lepidoptera; Glossata;
Insects; Persyota, Webpeta; Rodopersyota; Lepidoptera; Glossata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Okanache M., Ishikawa E., Sizukii Y.,
in the S. falaking naciectide deeqences. "ionologies with fibroin gene
in the S. falaking naciectide sequences.";
J. Biol. Chem. 257:13192-13199(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                              627 AYAKGHLGISVLGNGGGVGLQAGAKASIDGSD----LDSHEASSGSRASHDARHDIDAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE SPECIFICITY: PRODUCED EXCLUSIVELY IN THE MIDDLE (MSG)
    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTS AS A CEMENT BY STICKING SILK THREADS TOGETHER SUBCELLULAR LOCATION: Secreted.
46; Mismatches 153;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     389 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           286 YGERVSVVATTSSLVGDCSPNTIDLS 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             737 SHEYAEMASRTESMSGOMSE---DLS 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-83082839; PubMed-6294094;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-AUG-1988 (Rel. 08, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 317-354 FROM N.A.
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Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
TISSUE=Middle silk gland;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=7091;
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SERI_BOMMO P07856; SERI_BOMMO

RESULT

EMBL, J01030; -; NOT_ANNOTATED_CDS. EMBL, J01031; -; NOT_ANNOTATED_CDS. EMBL. J01032: -: NOT_ANNOTATED_CDS EMBL; J01029; -; NOT_ANNOTATED_CDS

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SGD; S0001019; RIM101
                                                                                                                                                                                                                                                                                                                                                                                                                         PIR; S38995; S38995.
PIR; S48941; S48941.
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nes 72; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TRANSFAC; T01292;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CONFLICT
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                                                                                                                                                                                                                             14:
                                                                                                                                                                                                                                                                                                                                    527 ISTNPNL--NSNVMQNNNNLM---SGHNHLDELSSIKQEPPHQL--QQQQQPP----MDVQ 575
                                                                                                                                                                                                                                                                                                                                                                                               68 KLERORIEEEKKOLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIYCG 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              128 GVGSGQVMIDPVISPWGFVETSSTTHELSSISNPOMFNASSNNRCDTCFKKKRLDGDQNN 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        675 IFDSNPNGAPLRRYSGVPDHVN-LEDYIEQPHNYPTMQNSVKKDEFYNSRNNKFPHGLNF 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----SDHHQRSQGFLYDHR--IARAASV 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              238 S-------ASSTTINPYFNEATN-HTGPM-----EEFGSYMEGNPRNGSGG 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 794 SDYGEDEDVDDYDRPNATENSYYGSASNTHELPLHGRMPSRSNNDYYDFMVGNNTGNNNO 853
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  576 SVDSYTSDNPDSNVIAKSPDKRSSLVSLSK-----VSPHLLSS---TSSNGNTISCP 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             *Complete nucleotide sequence of Saccharomyces cerevisiae chromosome \operatorname{VIII} ,
                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                8 MSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKRPTLRGMGVA 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       734 YGDNNVIEEENNGDSSNVNRPQHTNLQHEFIPEDNESDENDIHSMFYYNHKNDLETKPLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 625 NVATNSOELEP----NNDISTKKSLSNSTLRHSSANRNSNYGDNKRPLRTTVSK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    188 VVRS--NGGGFSKYTMIPPPMNGYDQYLLQ------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Saccharomyces cerevisiae (taker's yeast).
Makaryota; Fungl; Ascomycota; Saccharomyceties;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Su S.Y., Mitchell A.P.; "Molecular characterization of the yeast mejotic regulatory gene
                                                                                                                                                                                                                                 Indels 125;
                                                                                                                                                                      Length 1165;
                                                                                                                   128140 MW; 0414978AA3056CE7 CRC64;
                                                                                                                                                                                                                             55; Mismatches 128;
                                                                                                                                                                      DB 1;

    Last sequence update)
    Last annotation update)

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16-0CT-2001 (Rel. 40, Last annotation upda
Regulatory protein RIM101 (Protein RIM1).
RIM101 OR RIM1 OR VHOOZYM.
                                                                                                                                                                      Score 95.5;
Pred. No. 7.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-FEB-1994 (Rel. 28, Created)
EMBL; U12141; AAA99658.1; -.
EMBL; Z71330; CAA95925.1; -.
SGD; S0004999; YNL054W.
                                                                                                                                                                          5.8%;
                                                                                                                                                                                                                                 66; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         276 VKEYEFFPGKYGER 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                854 LNEYTPLRMKRGOR 867
                                                                                             protein.
                                                                                                              1165 AA;
                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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                                                                                         Hypothetical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R101_YEAST
P33400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-SK1;
                                                                                                                   SEQUENCE
                                                                                                                                                                              Query Match
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SCIENCE JES.1071-2082(1994).
- PUNCTION: POSITIVE REGULATOR OF WELGSIS THEORUGH THE ACTIVATION OF THE EXPERSION OF THEI. PROBABLE TRANSCRIPTION FACTOR.
- SUBCELLULAR LOCATION: Noclear.

15; between the Siss Tistitute of Bioinformatics and the EMBL outstation the Embloropean Biochoromatics and the Embloropean Bioinformatics fistitute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitlates requires a license agreement (See http://www.isb-sib.ch/announce.or send an email to licensetiab-sib.ch). This SWISS-PROT entry is copyright. It is produced through a collaboration 66 VAKLERQRIEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLGSNRIY 125 --SCASDAVSSCSASVPSAIAGSFKSHSTSPQILPPLPVGIS----QHLPSQQQQRAIS 312 313 LNQLCSDELSQYKPVYSP-----QLSARLQTILPPLYYNNGSTVSQGANSRSMNVYED 365 QRSQGFLYDHRIARASVSASSTTIN-----PYFNEATNHTGPMEEFGSYMEGNPR 270 425 QSVQG-----GSSISATANTATYVPVRLAKYPTGPSLTEHLPPLHS------ 465 366 GCSNKTIANATQFFTKLSRNMTNNYILQQSGGSTESSSSGRIPVAQTSYVQ-PPNAPSY 424 86; Gaps 6 FEMSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPTLRGMG 65 212 PGCSTCSKKFKRPQDLKKHLKIHLESGGILK----RKRGPKWGSKRTSKKNK-----174 TCFKKKRLDGDQ-----NNVVRSNGGGFSKYT----MIPPPMNGYDQYLLQSDHH Franscription requiation; Activator; DNA-binding; Zinc-finger; 126 CGGVGSGQV-MIDDVISPWGFVETSSTTHELSSISNPQMFNASS-----NNRC---DB 1; Length 625; Indels AD71E7B2D679E17E CRC64; N > K (IN REP 1) S > S (IN REP 1) S > S (IN REP 1) C > S (IN REP 1) C > S (IN REP 1) Q > S (IN REP 1) Q > S (IN REP 1) Q > S (IN REP 1) G > S (IN REP 1) G > S (IN REP 1) G > S (IN REP 1) G > S (IN REP 1) G > S (IN REP 1) G > S (IN REP 1) G > S (IN REP 1) G > S (IN REP 1) G > S (IN REP 1) G > S (IN REP 1) ASP/GLU-RICH (ACIDIC) 39; Mismatches 139; Metal-binding; Nuclear protein; Repeat; Meiosis NGSGGV -- KEYEFFPGKYGERVSVVATTSSLVGDCS 304 NTAGGVFNRQSQYAMPHY --- PSVRAAPSYSSSGCS 498 SMART; SM00355; ZnP_CZH2; 3. PROSITE; PS00028; ZINC_FINGER_CZH2_1; 2. PROSITE; PS50157; ZINC_FINGER_CZH2_2; 3. C2H2-TYPE. C2H2-TYPE. 5.8%; Score 95; 21.4%; Pred. No. C2H2-TYPE InterPro, IPR000822; Znf_C2H2.
Pfam; PF00096; zf-C2H2; 3. 68232 MW; EMBL; X72960; CAA51462.1; -. U11583; AAB65039.1; -. PRINTS; PR00048; ZINCFINGER Conservative

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EARLY GASTRULA STAGE AND LATER BECOMES HIGHLY EXPRESSED IN THE
61 NTLSNLLPSISA-KLHHSKNSHGKNGARFSSSNNSSQSTVASKTPRASPSRSKMMESSI 119
                                                                                                                     -SKYTMIPPPMNGYDOYLLOSDHHO--RSOGFLYD 228
                                                                                                                                                                                           120 DGVIMDRPGSLTPPQDMEKLVHFPDSSNNFLIPAPRGSSDSFNLP---HQISRTRNNTMS 176
                                                                                                                                                                                                                                                                 229 HRIARAASVSASSTTINPYFNEATNHTGPMEE-FGSYMEGNPRNGSGGVKEYEFFPGKYG 287
                                                                                                                                                                                                                                                                                                                                        177 SOITSISSIAPKPRTSSGIWSSNASANDPMQQHLLQQLQPTTSNNTTNSNTLNDYSTKTA 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITE 2 A Senopus hambiologue of the human transcription intermediary lacots, 12 required for a nuclear receptor pathway that also laces, 20 113:1372(2000).

Rech. Dev. 91.119:1372(2000).

Rech. Dev. 91.119:1372(2000).

RECH. Dev. 91.119:1372(2000).

RECH. PRESCRIPTIONAL COACTIVATOR FOR STEROID BRIDGE DAVIN (MCLEAR RECEPPORS AND WOLLEAR RECEPPORS. COACTIVATOR OF THE STEROID BRIDGE DAVIN (AF-2) BUT NOT OF THE MODULATING N-TERRITAL DOMAIN (AF-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nuclear receptor coactivator 2 (Transcriptional intermediary factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aenopus laevis (African clawed firo).
ENkaryota, Metzoza; Chordara; Craniata; Vertebrata; Euteleostomi;
Amphibia; Barrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -: - SIMILARITY: CONTAINS 1 PAS (PER-ARNT-SIM) DIMERIZATION DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 5.7%; Score 93.5; DB 1; Length 1516; Best Local Similarity 19.2%; Pred. NO. 16; Mester S7; Conservative 40; Mismatches 119; Indels 81; Matches 119.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     POLY-GLN.
W; 09851C00AB439A4A CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           de la Calle-Mustienes E., Gomez-Skarmeta J.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT; 1516 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                    288 ERVSVVATTSSLVGDCSPNTIDLSL 312
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                237 YFDNMVSTSGSQMADNKMNTNNLAI 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-20171035; PubMed-10704837;
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InterPro; IPR000014; PAS_domain.
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PROSITE; PS50112; PAS; 1.
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SMART; SM00091; PAS; 1.
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16-OCT-2001 (Rel. 40,
16-OCT-2001 (Rel. 40,
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1237 127
1516 AA;
                                                                                                               186 NNVVRSNGGGF----
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09W705:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Machin N., Lee J.S., Barnes G.; "Microtubule stability in budding yeast: characterization and dosage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-96437976; PubMed-8840504;
Hisapy M.-E., Menus V., Chart U.-C., Galibert F.;
Tranlysis of a G7 kb DNA sequence of chromosome x reveals 36 open
reading frames and a gene cluster with a counterpart on chromosome
                                                                                                                                                                                                                                                                                         Saccharomyces cerevisiae (Baker's yeast).
Exkaryota; Pungi, Ascomycota: Saccharomycutina; Saccharomycetes;
Saccharomycetales; Saccharomycetacees; Saccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -1- SIMILARITY: TO S.POMBE SPEC56F2.08C. SOME, TO YEAST YGL023.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ramezani Rad M., Kirchrath L., Hollenberg C.P.;
Submitted (SEP-1995) to the EMBL/GenBank/DDBJ detabases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       suppression of a benomyl-dependent tubulin mutant. 7
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                                                                                             01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
                             1091 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5.7%; Score 93.5;
19.6%; Pred. No. 11
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                                   PRT;
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InterPro; IPR000504; RNA_rec_mot.
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SGD; S0003851; JSN1.
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SMART; SM00360; RRM; 1.
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                                                                                                                                                                                                                                                           OR YJR091C OR J1890
                             STANDARD;
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Pfam; PF00806; PUF; 5.
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1091 AA;
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                                                                                                   01-FEB-1996 (Rel.
01-FEB-1996 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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of soft parts and desmoplastic small round cell timors, codes for an
encountry protein with novel regulatory domains.";
encountry 31087-31097(1994).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KINNSE 2 (FARZ).

- SUBCELLUIAN LOCATION: Nuclear, cytoplasmic and on cell surface.

- RELOGACES from cytoplasm to ribosomes upon FAZ activation.

- ALTERNATUR PRODOUSE; 2 ISOSOMEN; EWS (SHOWN HERE) AND EMS-B; MAY BE PRODUCED BY ALTERNATUR SPLICING.
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DISEASE, DESMOLAGRICS SMALL ROUND CELL TUMOR (DSRCT) IS CAUSED BY
CHROMOSOMAL TRANSLOCATION T(11,72)(P13,012), WHICH INVOLVES EWS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PTM: Phosphorylated; calmodulin-binding inhibits phosphorylation
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-- REPRESS TRANS-ACTIVATION BY THE SAO.
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Deloulme J.C., Prichard i., Delattre 0., Storm D.R.;
Trap proconceprocein FWS binds calmodulin and is phosphorylated by
"The proconceprocein FWS binds calmodulin and is phosphorylated by
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MEDLINE=21276345; PubMed-11278906;
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J. Biol. Chem. 275:18681-18687(2001).
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       MEDLINE-95352541; PubMed-7542907;
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Delattre O., Zuman J., Plougastel B., Desmaze C., Melot T.,
Peter M., Kovar H., Joubert I., de Jong P., Rolleau G., Aurias A.,
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denomic structure of the EMS gene and its relationship to EMSRI, 
site of tunor-associated chromosome translocation.";
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"Identification of new members of the Gas2 and Ras families in the
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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RAM-binding protein Faw (FAS oncogene) (Faring sercome breakpoint
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NCBI_TaxID=9606;

Thomas G.;

Homo sapiens

EWS HUMAN

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'ISSUE-Placenta;

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RESULT 12

(EC 2.7.7.7); RNA-se H (EC 3.1.26.4)].

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SAUCHACE FROM N.A.
MEDLINE-8833166; PLANGG-3418788;
Sperangle R., Kaller E.F., WILL H.;
TSolation and characterization of a hepatitis B virus endemic in

phosphomonoester.

whis SWISS-PROF entry is copyright. It is produced through a collaboration between the swiss institute of bioinformatics and the DME outstation the Entry and the Entry of the

EMBL, M22056; AAA45738.1; -.
PIR, A300B2; JDVLHH.
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01-MAR-1992 (Rel. 21, Last seq
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SGD; S0001551; NUP100.
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PIR; S39173; S39173.
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- FONTION. ESSENTIAL COMPONENT OF NUCLEAR PORE COMPLEX.

NUCLEOPORIES MAY BE INVOLVED IN BOTH BINDING AND TRANSLOCATION

THE PROTEINS DURING NUCLEOCYTOPLASMIC TRANSPORT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                106 VDPGVVLQGFPSSLGSNRIYCGG----VGSGQVMIDPVISPWGFVETSSTTHELSSISNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      256 RDGSHRLSGRTSDPTSRGALAGGDSTPIGPGSTAAHP-----STHHVD----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   162 OMFNASSNNRCDTCFKKKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       222 SQGFLYDHRIARASVSASSTIINP-----YFNEATNHTGP------MEEFGSYMEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321 RNGTISHHRVARCRISSVEDFIRRPFIQSKGAYPROGIRGIDPOGPKAHOOBENGSYLRG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Sequence of a 20.7 kb region of yeast chromosome XI includes the NNPIOD gene, an oper readfair frame (NSP) possibly representing a nurcleoside diphosphate kinase gene. FRNAs for His, Val and Trp in addition to seven ORFS with weak or no significant similarity to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Saccharomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0].-UU-1993 (Rel. 26, Created)
01.-UU-1993 (Rel. 26, Jast sequence update)
01.-OCT-1993 (Rel. 14, Last annotation update)
01.-OCT-1993 (Rel. 14) Last annotation update)
NU-100 (NU-1981 Port NU-100 (NU-1981 Port Protein NUP100/NSP100).
NUPLO OR NSP100 OR YKLOGEM OR NK1356.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wente S.R., Rout M.P., Blobel G.;
"A new family of year unclear pore complex proteins.";
J. Cell Biol, 119:705-723(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBCELLULAR LOCATION: Nuclear pore complex. DOMAIN: CONTAINS G-L-F-G REPEATS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             959 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Saccharomyces cerevisiae (Baker's yeast).
                                                                                                                                                                                                                                                                                                                                                                                                                         5.6%; Score 91;
10.6%; Pred. No.
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MEDLINE=93054906; PubMed-1385442;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN~5288c;
MEDLINE=94378724; PubMed~8091863;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             20.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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Q02629;
                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     142 GTLFGSQNNN ------SAGTSSLFGGQSTSTTGTFGNTGSSFGTG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           42 SRGRKPGSKTGQQKQKKPTLRGMGVAKLERQRISEEKKQLAAATVGDTSSVASISNNATR 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102 LPVPVDPGVVLQGFPSSLGSNRIYCGGVGS-----GQVMIDPVISPWGFVETSSTTHE 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             209 YDQYLLQSDHHQRSQGFLYDHRIARAASVSASSTINPYFNEATNHTGPM----EEFGSY 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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Insecta; Persygota; Neopetera, Endopersygota; Diptera; Brachycera;
Miscomorfina, Epiydroidaa; Drosophilidae; Drosophilidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
HEDINE-91115949; Pabhed-1703540;
HEMDINE-91115949: Pabhed-1703540;
HEMDINE-911169F. Pabhed-1703540;
HEMDINE-9111696: Pabhed-1703540;
HEMDING-FINGET 1., Laymon R.A., Goldstein L.S.B.;
Hemping-Finger 1., Laymon R.A., Goldstein L.S.B.;
Hemping-Finger 17054 (M.R.), squence and microtubule-binding region of the brosophila 2058 M.R.),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Adams M.D., Celniker S.E. Holt R.A., Evans C.A., Gocayne J.D., Ammertides P.G., Scherer S.E., il W. Hoskins R.A., Galle R.G. George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    155 LSSISNPOMFNASSNNRCDTCFKKKRLDGDQNNVVRSNGG-----GFSKYTMIPPPMNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15 SFGSNTSSFGGQOSQOPNSLFG-----NSNNNNNSTSNNAQS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nuclear protein; Transport; Repeat.

DOMAIN 33 571 29 X 6 AA APPROXIMATE REPEATS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      265 MEGNPRN--GSGGVKEYEFFPGKYGERVSVVATTS----SLVGDCSPNT 307
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99988 MW; D3985F9901BBAA51 CRC64;
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41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31; Mismatches
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Pfam; PF03093; Nucleoporin_FG; 24.
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MEDLINE-20196006; Pubmed-10731132;
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Button G.G., Wortman J.R., Vandell N.D., Zhang Q., Chen L.X.,
Ann K.H., Doyle C., Bazel R.G., Changer W., Perifer B.D.,
Ann K.H., Doyle C., Bazel R.G., Changer W., Perifer B.D.,
Ann K.H., Changer H.H., Changer R.G., Changer M., Perifer B.D.,
Benson K.Y., Benco P.V., Berman B.P., Bhandari D., Bolshaboy S.N.,
Butts K.C., Busam D.A., Butter H., Caddau E., Center A., Chanfra I.,
Cherry J.M., Carlos S., Dalhac C., Daverstein P. S.,
Butts K.C., Busam D.A., Butter H., Caddau E., Center A., Chanfra I.,
Cherry J.M., Carlos S., Dalhac C., Daverstein P., Bourkon B.C.,
Duckon K., Doyle S., Dalhac C., Perraz C., Ferriera S., Pielschman W.,
Fooler C., Gebrellan A.E., Cargo N.S., Golbart W.M., Classar K.,
Butts N.L., Barryellan A.E., Cargo N.S., Golbart W.M., Classar K.,
Glodek A., Gong F., Oorrell J.H., Gu Z., Ghan P., Harris M.,
Bastin D., Houston K.M., Mannel B., Randade J., Rarris M.,
Bastin D., Mannel P., Karlos M., Cargo N.S., Colbart W.M., Classar K.,
Alani H., Kallah F., Karlos M., Cargo N.S., Golbart W.M., Classar K.,
Alani H., Kallah T.J., Well W.H., Theyam C., M.,
Mexkllov G. M. Hishina M.Y., Wobarty C., McCardo M.P., Mebreron D.L.,
Melson D.K., Milyon K., Sauders R.D., C., Scheeler F., Shan H.,
Shiel S., M. Murphy B. Murphy L., Warny D., N., Nelson D.L.,
Melson D.K., Milyon K., Sauders R.D., C., Scheeler F., Shan H.,
She B.C., Sirdalin K., San D., Shapelon M., Stupski M., Wanny S.,
Waltzkas R., Percot C., Turner R., Wenter E., Wang S., Wann S.,
Waltzkas R., Percot C., Worter R., Wang S., Wan S.,
Waltzkas R., Percot C., Worter R., Wang S., Wang S.,
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Waltskas R., Percot G., Worter R., Wang S., Wang S.,
Wang S., Waltskas R., Waltskas M., Waltskas M., Wan
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-!- FUNCTION: MAY PLAY AN IMPORTANT ROLE IN THE REGULATION OF

MICROTUBULE ASSEMBLY AND INTERACTION. SUBCELLULAR LOCATION: ASSOCIATED WITH CYTOPLASMIC MICROTUBULES AND WITH THE MITOTIC SPINDLE.

ALTERNATIVE PRODUCTS: 3 ISOPOWAS, C2, B3 AND 75 (SHOWN HERE); ARR PRODUCED BY ALTERNATIVE STLICTING.
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MISSING (IN ISOFORM B3 AND ISOFORM C2). MISSING (IN ISOFORM C2). TO MICROTUBULES (POTENTIAL) 478422E2CEE03F70 CRC64: F179ase: FBgn0002645; Map205. Microtubules; Alternative splicing; Phosphorylation. ASP/GLU-RICH (ACIDIC). ARG/LYS-RICH (BASIC). ASP/GLU-RICH (ACIDIC) (IN ISOFORM C2 2 ^ 126669 MW: EMBL; AE003780; AAF57214.1; -. EMBL; X54061; CAA37996.1; -. 1124 1185 977 578 785 112 745 118 745 97 557 57 650 70 704 70 PIR; A36685; A36685. VARSPLIC DOMAIN DOMAIN BINDING VARSPLIC SEQUENCE DOMAIN

Gaps 9 STDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKP------GSKTGQQKQKK 58 . 29 37; Mismatches 146; Indels Local Similarity 20.8 les 65; Conservative Matches

Genew: HGNC:7669; NCOA2.

MIM: 601993;

TRANSFAC: T02483;

13

DB 1; Length 1185;

5.5%; Score 90.5; 20.8%; Pred. No. 21

Query Match

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                                                                                                                                                                                                                                                                                                                                                1268 QGL-------NYTPS#VAPSGMPAT#GNPRIPQANAQQFPFPPNYGISQQPDFG 1314
                                                                                                                                                                                                                                                                                                                                                                                                              1315 FTGAT-----PQSPLMSP-----PMAHTQSPMMQQSQAN-----P 1345
                                                                                                                                                                                                                                                                                                                            64 MGVAKLERQRIBEEKKQLAAATVGDTSSVASISN-----NATRLPVPVDPGVVLQGFPS 117
                                                                                                                                                                                                                                                                                                                                                                                   118 SIGSNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                           178 KKRLDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASV 237
                                                                                                                                                                                                                                            85; Gaps
                                                                                                                                                                                                                                                                    13 NSVGNPNDLLR------NTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPTLRG 63
                                                                                                                                                                                                          Ouery Match
5.5%; Score 90.5; DB 1; Length 1464;
Best Local Similarity 19.9%, Fred No. 27;
Matches 52; Conservative 36; Mismatches 89; Indels 85;
Matches 52; Conservative 36; Mismatches 89; Indels 85;
1346 AYQAPSDINGWAQGNMGGNSMFSQQSPPHFG-----
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Job time : 34 secs
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